DOCUMENT RESUME

ED 406 734 EA 028 299

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|---|---|
| TITLE | Block Scheduling in North Carolina High Schools. |
| INSTITUTION | North Carolina State Dept. of Public Instruction, Raleigh. Div. of Innovation and Development Services. |
| PUB DATE | Dec 94 |
| NOTE | 72p. |
| PUB TYPE | Reports - Evaluative (142) |
| EDRS PRICE | MF01/PC03 Plus Postage. |
| DESCRIPTORS | Academic Achievement; *Block Scheduling; Flexible Scheduling; *High Schools; Program Implementation; *School Schedules; *Statewide Planning; *Time Blocks; *Time Factors (Learning) |
| IDENTIFIERS | *North Carolina |

ABSTRACT

Since 1989, North Carolina has implemented several statewide initiatives to establish high expectations for all students. State educators have also paid increasing attention to the flexible use of time as a resource for expanding student learning. Block scheduling is a reorganization of school time that is increasingly being adopted by North Carolina public high schools. This report examines the extent of block scheduling in North Carolina high schools, advantages and disadvantages perceived by early implementers and students, instructional practices used in block-scheduled high schools, and policy issues. Data were derived from surveys, school site interviews with administrators, focus-group interviews with teachers and students at two high schools, and limited end-of-course test scores. Findings show that implementation of block scheduling is rapidly growing in North Carolina; teachers get more planning time; direct teacher contact hours are reduced by 30 hours; students report less homework; staff development and planning are vital to successful implementation; and there is little effect on end-of-term test performance. Most teachers and administrators identify the following strong points: students can take more courses and electives and have fewer classes to prepare for at one time, and teachers have more planning time, can use class time more effectively, and have fewer preparations. The weakest points, in the opinion of teachers and administrators, appear to lie in the accommodation of transfer students and the difficulty of students' recovering from absences. Four figures and six tables are included. Appendices contain a list of participating schools and their schedules, surveys, and an article on the pros and cons of block scheduling. (Contains eight references.) (LMI)

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ED 406 734

# Block Scheduling in North Carolina High Schools

December 1994

Division of Innovation and Development Services
Accountability Services Area

North Carolina Department of Public Instruction
Bob Etheridge, State Superintendent

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# Block Scheduling in North Carolina High Schools

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# Block Scheduling in North Carolina High Schools

Prepared by Chris P. Averett, Ph. D.

# FOREWORD

In the Fall of 1989, low student performance on the Scholastic Aptitude Test sparked statewide efforts to improve student achievement. The spotlight first centered on North Carolina's high schools. State Superintendent Bob Etheridge appointed the Task Force on Excellence in Secondary Education to study the needs and recommend strategies for improving high schools. Two main issues were identified during this study: the need to establish high expectations for all students and the need to consider different ways to use time as a variable resource in schools to support students' different ways and rates of learning.

Since that time, statewide initiatives to establish high expectations for all students to prepare them as citizens in the 21st Century include:

- State provision of PSAT for local diagnostic use,
- End-Of-Course Tests for all core subjects,
- increased graduation requirements in core subjects,
- increased adoptions of TECH PREP, and
- revision of the Standard Course of Study to reflect national recommendations.

In addition to the emphasis on high expectations, state educators have paid increasing attention to the flexible use of time as a resource for expanding student learning. In this arena, the use of block scheduling (4 x 4) is the most rapidly growing practice in North Carolina's high schools.

Because of the high implementation rate of block scheduling among North Carolina high schools, in the spring of 1994, the Department of Public Instruction completed a study of block scheduling to determine its current implementation status, identify strengths and weaknesses associated with its implementation, and note policy issues requiring further analysis.

This report examines the extent of block scheduling in our high schools, advantages and disadvantages perceived by early implementers and students, instructional practices used in block scheduled high schools, and policy issues raised. Over time, End-of-Course test scores of block scheduled high schools will be examined.

The results of this study are not conclusive at this time since they represent only one year's data. There is a need to follow block scheduled high schools for three to five years to develop a better understanding of what works.

Bob Etheridge

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**Block Scheduling in North Carolina High Schools:**

**Executive Summary of Findings**

Block scheduling, sometimes referred to as 4X4, concentrated curriculum plan, or semester plan, is a reorganization of school time that is increasingly being adopted by North Carolina public high schools. Although there are variations in implementation, the predominant pattern is for students to take four courses each semester in 90-minute class periods, for a total of eight per year, instead of six or seven year-long courses in 45 to 55-minute class periods. Schools initially became interested in this plan after the State Board of Education increased graduation requirements from 11 to 14 courses in 1991. The plan offers students the ability to take more electives.

An evaluation of block scheduling was begun at the end of the 1993-94 school year. Most schools and school systems are conducting internal evaluations for their own planning. A statewide study has the advantage of analyzing the effects and conditions of block scheduling in many different schools, large to small, east to west and rural to urban. Because schools have only very recently begun implementing block scheduling, and many effects of block scheduling will take several years to be realized, this is a report of initial findings.

The study involved surveys of school principals to determine the prevalence of implementation of block scheduling, as well as other innovations in the reorganization of school time. Schools which were in either the first or second year of implementation were selected for participation in follow-up surveys of school administrators, guidance counselors, teachers, and students. Two schools participated in case studies which included focus groups of teachers and students, and interviews with administrators and guidance counselors. In addition, performance on selected End-of-Course Tests was collected and analyzed. All findings to date are based on schools in the first or second year of implementation. Most were in the first year. These schools are "early innovators" in the process of change and their results might not generalize to other schools in the future.

Highlights of the study include the following:

- Implementation of block scheduling is *rapidly growing* in North Carolina. In 1992-93, three high schools, about 1% of all North Carolina public high schools, were implementing a full block schedule. In 1993-94, slightly less than 10% of schools were block scheduled. This year about 38% are block scheduled, and in 1995-96, over 60% of high schools report that they will be implementing block scheduling plans. The College Board reports that about 350 schools, nationwide, are implementing some form of block scheduling this year. They also report that it is not a major national trend, but is most prevalent in North Carolina and Virginia.

- Plans to implement block scheduling appear to be *site-based management* decisions. Over 90% of teachers report that the change in scheduling was initiated by the principal (42%), a school-based committee of teachers (36%), or a school-based committee that included parents (12%). Over two-thirds of the teachers report that they were involved in the decision-making at the beginning of planning.

- Under block scheduling, a teacher would typically teach 3 courses per semester and 6 course per year, rather than the 5 or 6 at a time in a traditional schedule. Survey results indicated the average *number of courses taught* dropped from 4.5 to 2.7 under block scheduling. The average number of *preparations* decreased from 3.2 to 2.3, and the average number of students taught per day decreased from 116.1 to 63.5. During an entire school year, a teacher would still teach about 130 students. The average *class size* dropped from 29.8 to 24.5. Average class size changes will most likely vary by size of school and staff, and by subject area. For example, vocational or other elective courses may actually increase in average class size. In addition, since during a 6-period day 1/6 of the teachers are not teaching during each class period (they are in planning periods), and during the 4-period day 1/4 of the teachers are not teaching, the average class size, without staff changes, should increase under block scheduling.

- The amount of *planning time* teachers have increases dramatically under block scheduling, from one 50 to 55-minute period to one 90-minute period. This results in an increase of about 100 hours per year. Some schools have used a portion of the planning time for staff development.

- The *instructional time*, or direct teacher contact hours, is reduced under block scheduling. 180 days of a traditional 55-minute period is 165 hours, while 90 days of 90-minute class periods is 135 hours, a potential loss of 30 hours per year. The loss is not quite as large when one takes into account that less time per day is used in taking roll, settling into the class, and dismissing class, nor when compared to 7-period day schedules which have 50-minute class periods. The amount of time is equal to schedules which have 45-minute class periods.

- The *proportion of time* in which students are enrolled in state-required *core academic courses* (language arts, mathematics, social studies, and science) is reduced from 54% (13 of a potential 24 courses in a traditional 6-period day) to 41% (13 of a potential 32 courses in block scheduling). The total number of instructional hours in the core academic courses is also reduced; for example, in a 55-minute class period for 180 days a student would have 660 hours of instruction in English in four years, while under block scheduling the number of hours would be 540. However, students could have the opportunity to take *more courses in core academic areas* if the courses are available as electives.

- The proportion of time in *free electives* (not including the Health and Physical Education requirement) increases from 42% in a 6-period day to 56% in block scheduling.

- The number of potential *homework* assignments is reduced from 180 to 90. If teachers assign homework at a rate of 30 minutes a night, the number of hours doing homework could be reduced from 90 to 45. However, under block scheduling, students may typically take two academic courses rather than four at a time, so teachers could assign more homework per night under block scheduling to make up the difference. Many students report that one of the best things about block scheduling is that they have *less homework* and that they get to do it in class.

- Many educators believe that the longer class periods will allow *more in-depth instruction with fewer disruptions*. Over 75% of the teachers surveyed believed that block scheduling would have a positive effect on student grades, problem solving ability, higher-order thinking, achievement on tests, and in-depth knowledge of subject matter. Over half felt that teacher and student stress would be reduced, and that discipline and attendance would improve. Less than 40% felt there would be a reduction in dropout rates, with about 15% believing that dropout rates would increase.

- Most teachers and administrators believe that the strongest points about block scheduling are that students can *take more courses* and electives, have *fewer classes to prepare for* at a time, and that teachers have *more planning time*, can *use class time more effectively*, and have *fewer preparations*. Students also believe that the most important advantages of block scheduling to them are the opportunity to take more courses, to prepare for fewer courses at a time, and to *finish a course in one semester*.

- The weakest points, in the opinion of teachers and administrators, appear to be accommodating *transfer students* and the difficulty of students *recovering from absences*. Some block schedule schools have implemented after school programs to help students catch up on material they have missed.

- *Time management*, both during the 90-minute classes and pacing throughout the semester, and *instructional practices* are important issues when changing to a block schedule. Teachers report that they use a variety of instructional practices on a regular basis, with more than half reporting that they focus on problem solving, conduct group discussions, do performance assessments, and have students doing individual seat work in class on a regular basis. Over 40% of teachers worry that they have to present too much material too quickly or find it difficult to teach all the *Standard Course of Study* in the allotted time. On the other hand, over 85% believe that they can provide more quality instruction and are comfortable with their instructional practices in the longer class periods.

- About half of students surveyed believe that their block-scheduled classes are more *interesting* than regular classes, and less than 15% believe that the classes were less interesting. However, when asked about the worst things about block

scheduling, 17% of students reported that the classes are *boring* and 32% report that the classes are *too long*.

- Teachers and administrators recommend that *staff development* and *planning* are keys to successful implementation of block scheduling. Pacing guides need to be developed or revised and instructional practices need to be improved in order to keep block-scheduled courses from becoming "watered down". While over 90% of teachers believe they are adequately trained to teach under block scheduling, and most are comfortable with their instructional practices, it appears that the students believe that improvements could be made to make the courses more interesting to them.

- Although there may be some problems in implementation, about 80% of students and 85% of teachers *prefer the block schedule* and would not want to return to a traditional schedule. For teachers, the block schedule may offer a more *professional environment* , with more planning time, fewer students at a time, and fewer preparations. Students like the opportunity to take more courses, to have less homework and fewer classes to prepare for, and to complete a course in a shorter period of time.

- *Time is precious* to teachers in block scheduling. Teachers feel that they have less time, and fewer days, to accomplish their tasks, so use of the instructional day for such things as pep rallies, participation in athletics, or to visit with guidance counselors become issues in the day-to-day management of school.

- Preliminary indications are that across all schools block scheduling has had little effect on *end-of-course test scores* to date. Average scores across schools and students are about the same as before block scheduling. Within schools, some subject area test scores are up while others are down. There does not appear to be a pattern related to school or type of subject.

- *Long term effects on student achievement* or other indicators of *school success* have not been evaluated yet. Until students have been in block scheduling for several years, its effects on drop out rates, SAT scores, success in college or work, long term retention of knowledge and skills, or success in the next course in a sequence cannot be gauged.

- As more schools implement block scheduling, and as schools and students gain more experience in block scheduling, *further research* needs to address the following questions:
  - What types of courses do students take with the increase in elective opportunities? What proportion are in core academic areas, the arts, foreign languages, physical education, or vocational courses?
  - Does participation in block-scheduled courses have similar effects on student achievement for all students, e.g. at-risk students as well as academically gifted students?

- Do students retain as much of what they learn as students in traditional schedules? Do students forget more of the material in the breaks between courses when they may have a year or more break rather than the summer?
- What is the long term effect on attendance, discipline, drop out rates, SAT scores, and post secondary success?
- How do schools who implemented block scheduling as a site-based reform with teacher involvement in decision making compare with schools in which teachers feel they are being force to make the change?
- How is the additional planning time used? Is there more staff development, professional dialogue among teachers, and student assignments such as projects and essays which take longer to grade?
- Are courses that do not have end-of-course state tests taught differently?

- *Policy issues* (local and/or state) which arise under block scheduling include the following:
  - Should the program emphasize enrichment of student learning or an opportunity to graduate early?
  - Should the number of credits required to graduate be raised when students have the opportunity to take 32 rather than 24 courses in four years?
  - Should the number of credits required in core academic areas be increased?
  - How can an overall quality education which is enriched yet still has a substantial core curriculum be insured?
  - What are the implications for the Carnegie unit when well over half of the schools are implementing block schedules?
  - Should principals have flexibility in allotting teaching positions so that more advanced and varied electives can be made available to students?
  - Should the *Standard Course of Study* be modified to accommodate semester based courses rather than year long courses?
  - What should homework policies be?
  - How should extra-curricular activities be handled to minimize missed class time?
  - How are Advanced Placement courses handled with block scheduling?
  - Are there longer-term implications for reducing teacher allotments due to efficient use of time versus using extra teacher time to help students?
  - What are the implications for teacher training? Student teaching?

# Analysis of Results

The information on the following pages has been extrapolated from an analysis and synthesis of responses to the Block Scheduling Surveys, school site interviews with administrators, focus groups with teachers and students at two high schools, and limited End-of-Course Test data.

## Organization of School Time in North Carolina High Schools N=243

| Type of Schedule | Number | Percent |
|---|---|---|
| Block Scheduling | 155 | 64% |
| 7 or 8 Shortened Class Periods | 48 | 20% |
| Extended School Day | 83 | 34% |
| Alternative Day or A/B Schedule | 13 | 5% |
| Semester Scheduling | 35 | 14% |
| Night School | 26 | 11% |
| Year-Round School | 4 | 2% |
| Summer School | 98 | 40% |
| Other | 34 | 14% |

Note: These are not mutually exclusive. Schools may have implemented programs and discontinued them during the time period asked about.

# Organization of School Time in North Carolina High Schools: "Other" Types of Schedules

## Banking Time:
for Remediation
for Extended Activity
for Staff Development

## Blocking Selected Courses:
Required Courses
Vocational Courses

## Blocking Selected Students:
At Risk Students
9th Graders

## Modified Block Schedules:
2 days out of 10
2 days out of 5

## Other Opportunities
"0" Periods
Saturday School

## Block Scheduled Schools in North Carolina N=243

| Year | Number | Percent |
|---|---|---|
| 1992-93 | 3 | 1% |
| 1993-94 | 18 | 7% |
| 1994-95 | 72 | 30% |
| 1995-96 | 58 | 24% |
| 1996-97 | 4 | 2% |

| Year | Cumulative Number | Percent |
|---|---|---|
| 1992-93 | 3 | 1% |
| 1993-94 | 21 | 9% |
| 1994-95 | 93 | 38% |
| 1995-96 | 151 | 62% |
| 1996-97 | 155 | 64% |

## Who initiated the change to block scheduling in your school?

2.5% the central office

2.1% the school board

42.4% the principal

36.2% a school-based committee of teachers

12.3% a school-based committee that included parents

4.5% other

## When were teachers involved in the decision-making?

67.3% at the beginning

27.9% during the process

4.8% at the end

# Teaching Under Block Scheduling

| | Traditional Schedule | Block Scheduling– Each Semester |
|---|---|---|
| Average Number of Courses Taught* | 4.5 | 2.7 |
| Average Number of Preparations* | 3.2 | 2.3 |
| Average Number of Students per Day* | 116.1 | 63.5 |
| Average Class Size* | 29.8 | 24.5 |
| Planning Time per Day | 55 minutes | 90 minutes |
| Planning Time per Year | 165 hours | 270 hours |

*N=600 teachers. Note that these data are based on self-reports of teachers surveyed. Average class size changes will most likely vary by size of school and staff, and by subject area. For example, vocational or other elective courses may actually increase in average class size. In addition, since during a 6-period day 1/6 of the teachers are not teaching during each class period (they are in planning periods), and during the 4-period day 1/4 of the teachers are not teaching, the average class size, without staff changes, should increase under block scheduling.

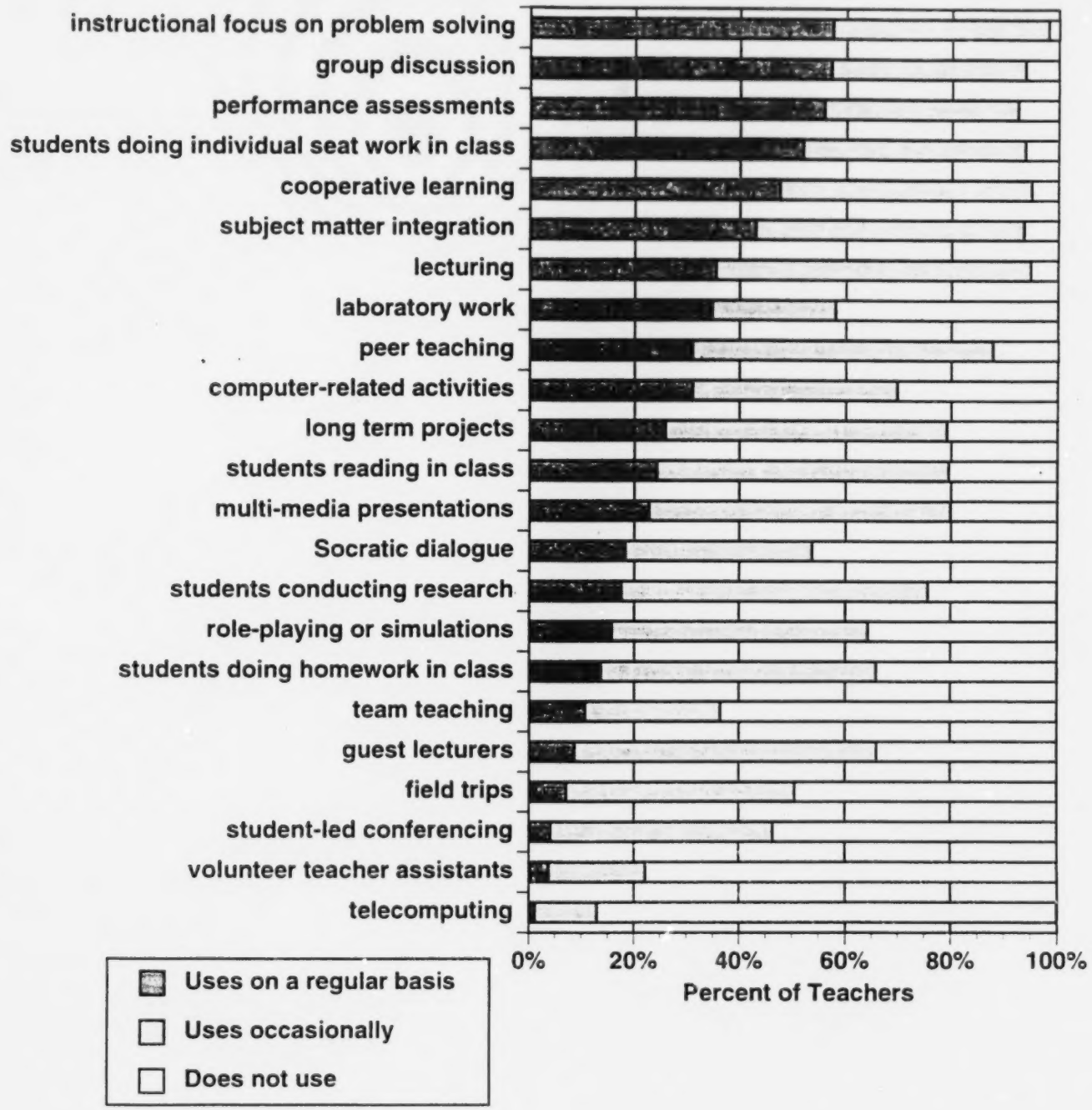
## INSTRUCTIONAL TIME SCENARIOS

| | Traditional 6-Period Day | Block 4 X 4 |
|---|---|---|
| Number of Hours Per Course | 55 min. X 180= 165 hours | 90 min. X 90= 135 hours |
| Number of Courses Per Year | 6 | 8 |
| Number of Courses in 4 Years | 24 | 32 |
| Number/Percent of Credits Required in Core Academic Areas Before 1991 | 10<br>10 of 24= 42% | |
| Number/Percent of Credits Required in Core Academic Areas Today | 13<br>13 of 24= 54% | 13<br>13 of 32= 41% |
| Free Electives (not including required Health & P.E.) | 10<br>10 of 24= 42% | 18<br>18 of 32= 56% |

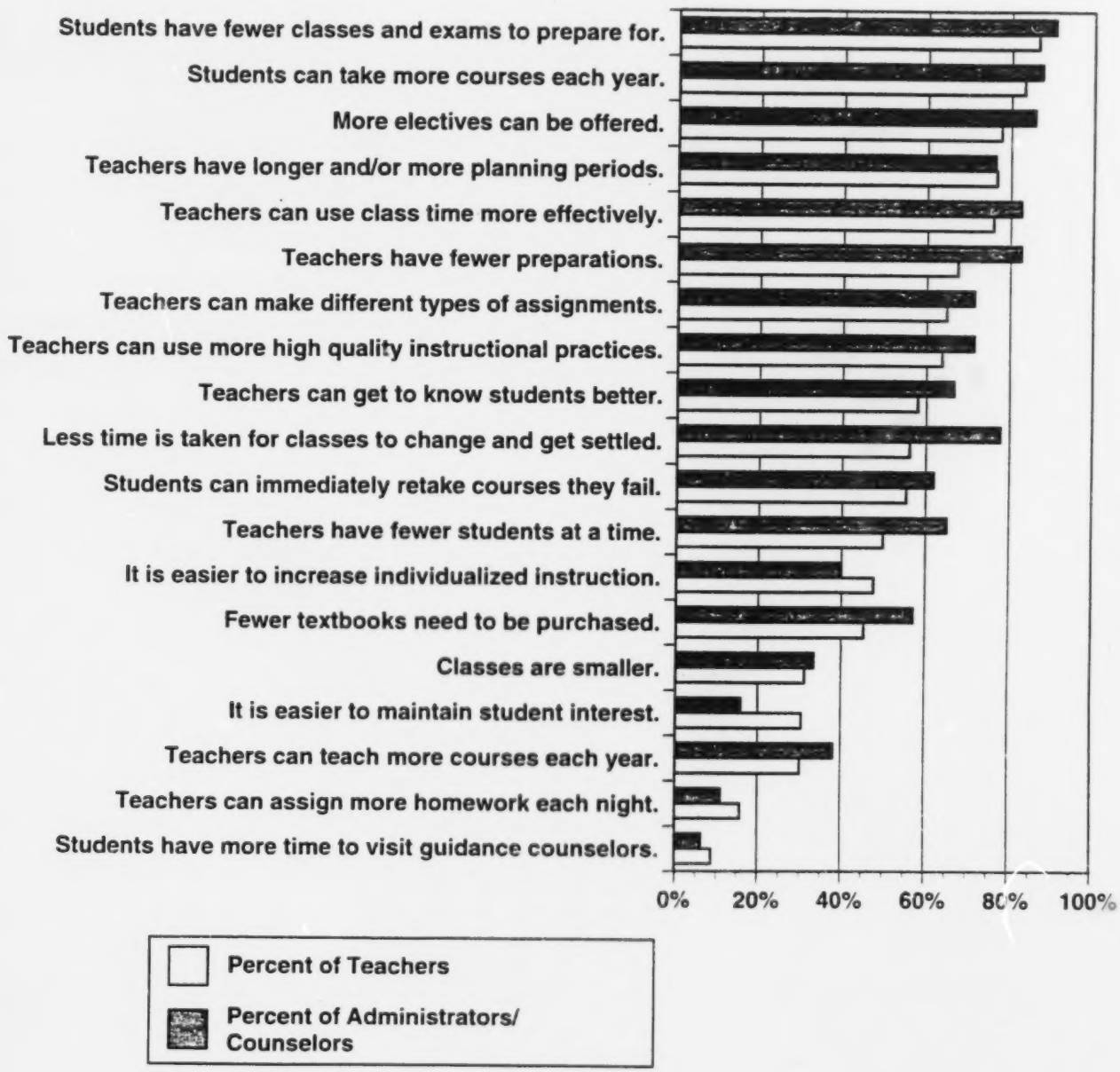
| | | |
|---|---|---|
| English I–IV | 660 hours<br>16.7% of credits | 540 hours<br>12.5% of credits |
| Math, Science, and Social Studies (3 courses each) | 495 hours ea.<br>12.5% of credits | 405 hours ea.<br>9.4% of credits |
| Band *or* Foreign Language<br>(if taken year long every year) | 660 hours<br>16.7% of credits | 1080 hours<br>25.0% of credits |
| Number of Potential Homework Assignments | 180 | 90 |
| Homework at rate of 30 minutes a night | 90 hours per course | 45 hours per course |

This table is based on an analysis of block scheduling by Randy Harter in Centroid.

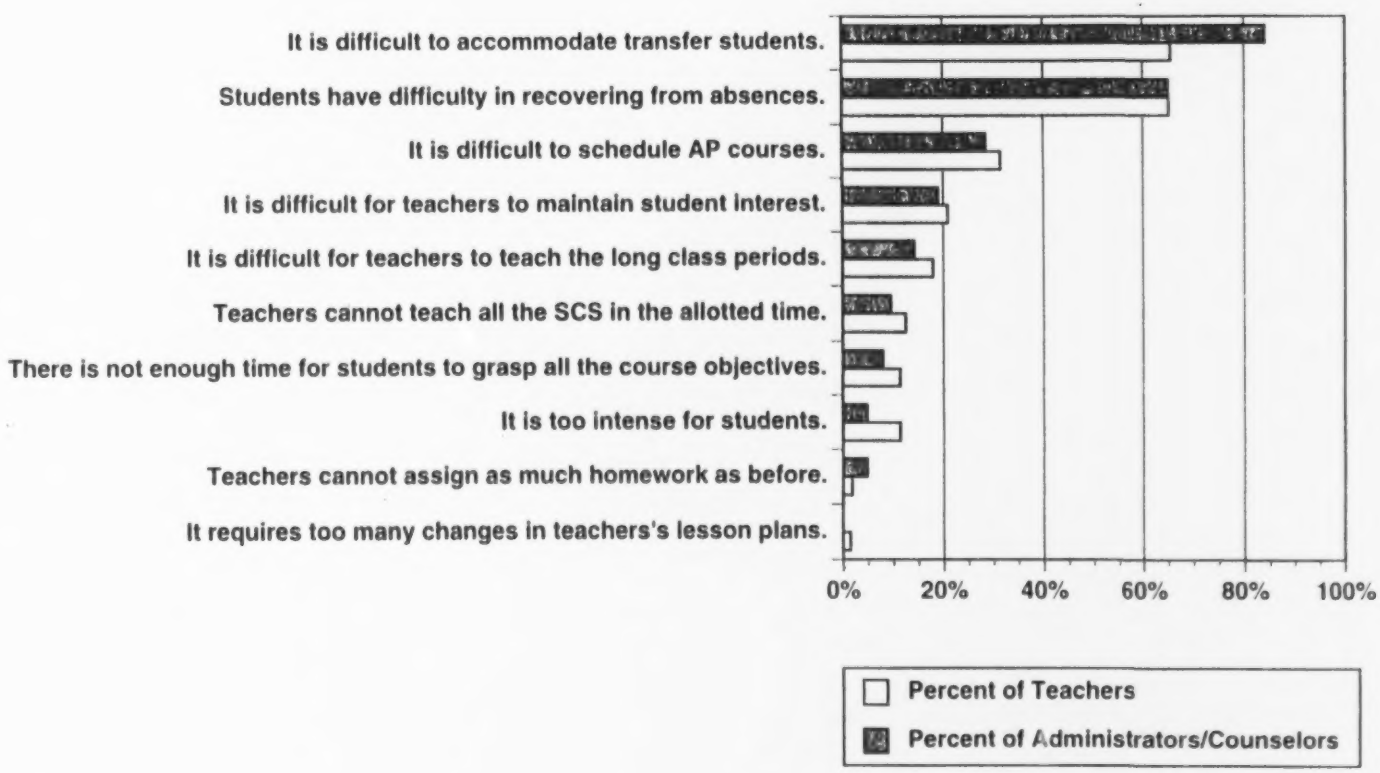
# Use of Various Instructional Practices by Teachers in Block Scheduled Schools



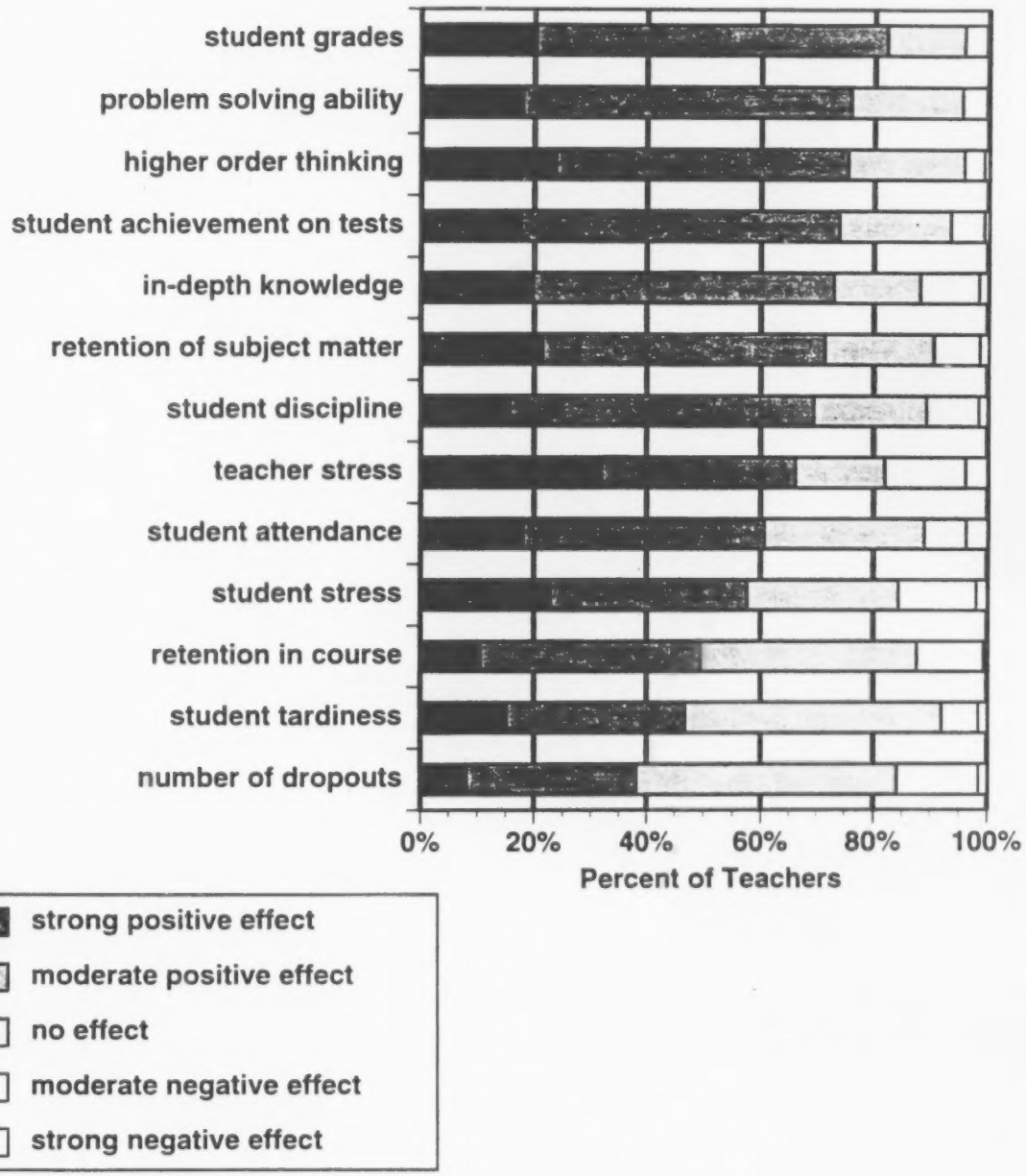
## Educators Beliefs about the Strong Points of Block Scheduling


Students have fewer classes and exams to prepare for.
Students can take more courses each year.
More electives can be offered.
Teachers have longer and/or more planning periods.
Teachers can use class time more effectively.
Teachers have fewer preparations.
Teachers can make different types of assignments.
Teachers can use more high quality instructional practices.
Teachers can get to know students better.
Less time is taken for classes to change and get settled.
Students can immediately retake courses they fail.
Teachers have fewer students at a time.
It is easier to increase individualized instruction.
Fewer textbooks need to be purchased.
Classes are smaller.
It is easier to maintain student interest.
Teachers can teach more courses each year.
Teachers can assign more homework each night.
Students have more time to visit guidance counselors.
0%
20%
40%
60%
80%
100%
Percent of Teachers
Percent of Administrators/ Counselors

## Educators Beliefs about the Weak Points of Block Scheduling


It is difficult to accommodate transfer students.
Students have difficulty in recovering from absences.
It is difficult to schedule AP courses.
It is difficult for teachers to maintain student interest.
It is difficult for teachers to teach the long class periods.
Teachers cannot teach all the SCS in the allotted time.
There is not enough time for students to grasp all the course objectives.
It is too intense for students.
Teachers cannot assign as much homework as before.
It requires too many changes in teachers's lesson plans.
0%
20%
40%
60%
80%
100%
Percent of Teachers
Percent of Administrators/Counselors

# Teachers Beliefs about the Effects of Block Scheduling on Various Outcomes.



## Teachers' Opinions about Staff Development and Planning

| | | Disagree 0-1 | Agree 3-4 |
|---|---|---|---|
| 8. | I think that I am adequately trained to teach in a block schedule. | 2.2% | 92.1% |
| 10. | We should have taken more time to plan before we implemented block scheduling. | 57.0% | 21.1% |
| 18. | My school provided me with a good sense of why we were changing to block scheduling. | 5.7% | 84.9% |
| 20. | The staff development we had before we implemented block scheduling was very helpful. | 9.7% | 75.8% |
| 32. | I could have used more staff development before we implemented block scheduling. | 41.8% | 34.0% |
| 49. | Teachers were adequately involved in the decision-making to change to block scheduling. | 11.8% | 74.9% |

10. Who initiated the change to block scheduling in your school? (Check only one.)

| | |
|---|---|
| 2.5% the central office | 2.1% the school board |
| 42.4% the principal | 36.2% a school-based committee of teachers |
| 12.3% a school-based committee that included parents | 4.5% other; specify:_____ |

11. When were teachers involved in the decision-making? (Check only one.)

67.3% at the beginning  27.9% during the process  4.8% at the end

## Instructional Implications

| | | Disagree 0-1 | Agree 3-4 |
|---|---|---|---|
| 17. | I worry that I have to present too much material too quickly. | 46.2% | 40.9% |
| 21. | I find it difficult to teach all the *Standard Course of Study* in the allocated time of block scheduling. | 41.5% | 43.7% |
| 43. | I give more open-ended and/or essay tests since we implemented block scheduling. | 29.3% | 46.4% |
| 7. | I assign more written work and papers since we implemented block scheduling. | 29.6% | 51.3% |
| 11. | Under block scheduling I can spend more time focusing on students who need extra help. | 14.7% | 73.1% |
| 46. | I have had more discipline problems in my classes since we implemented block scheduling. | 78.5% | 8.6% |
| 44. | Under block scheduling I can get to know students better. | 11.8% | 73.5% |
| 31. | I have difficulty maintaining student interest for the entire period since we implemented block scheduling. | 61.3% | 28.0% |
| 12. | I am comfortable with my instructional practices since we implemented block scheduling. | 5.0% | 90.0% |
| 24. | I can provide more quality instruction with the longer class periods. | 6.1% | 85.7% |
| 33. | The teaching methods I have always used work better in a block-scheduled course. | 20.2% | 54.3% |
| 38. | I have had to change my ways of teaching since we implemented block scheduling. | 26.2% | 59.9% |

Note: Numbers refer to item numbers in questionnaire.

## Teachers' Opinions about Students in Block Scheduled Classes

| | | Disagree 0-1 | Agree 3-4 | N |
|---|---|---|---|---|
| 9. | Most of my students like block scheduling. | 2.9% | 92.1% | 279 |
| 15. | My students are more interested in the subject matter since we implemented block scheduling. | 17.2% | 55.2% | 277 |
| 25. | Students have had difficulty recovering from absences during block scheduling. | 28.2% | 57.1% | 280 |
| 26. | My students are learning more since we implemented block scheduling. | 8.6% | 71.6% | 278 |
| 36. | I worry that students don't learn as much as they did under a traditional schedule. | 68.4% | 16.7% | 280 |
| 40. | Students have difficulty sitting through the longer periods of block scheduling. | 46.1% | 41.1% | 280 |
| 42. | Students can focus better under block scheduling because they have fewer courses. | 3.2% | 90.3% | 280 |

## Teachers' Opinions about Block Scheduling

| | | Disagree 0-1 | Agree 3-4 | N |
|---|---|---|---|---|
| 19. | There was nothing wrong with the old schedule, so I don't know why we had to change. | 82.3% | 5.4% | 277 |
| 23. | I believe block scheduling is a better way to organize school time. | 4.7% | 90.0% | 279 |
| 29. | Block scheduling has been successful in my school. | 1.1% | 88.9% | 280 |
| 30. | I was a strong advocate for block scheduling from the beginning. | 21.3% | 61.3% | 276 |
| 37. | I would prefer to return to a traditional schedule. | 85.8% | 5.0% | 279 |
| 41. | I think our block schedule does <u>not</u> need any changes. | 33.7% | 47.0% | 279 |
| 47. | I am supportive of the philosophy of block scheduling but am still having problems with implementation in my classroom. | 65.9% | 16.1% | 280 |
| 50. | Students earning completing their credits early under block scheduling should be allowed to graduate early. | 19.7% | 67.4% | 276 |

Note: Numbers refer to item numbers in questionnaire.

# Student Opinions

## Interest Level of Block Scheduled Classes Compared with Regular Classes

| Interest Level | Number | Percent |
|---|---|---|
| More Interesting | 331 | 51% |
| The Same in Interest | 224 | 37% |
| Less Interesting | 88 | 14% |

N=643 Students

## Which would you prefer for your school to do?

| Preference | Number | Percent |
|---|---|---|
| Keep the Schedule We Have Now | 494 | 78% |
| Keep the Schedule for Some Courses | 63 | 10% |
| Return to the Old Schedule | 50 | 8% |
| Other | 29 | 5% |

N=636 Students

Note: Numbers refer to item numbers in questionnaire.

## Student Opinions

### How important are these opportunities to you?

| A Chance: | Percent Important or Very Important |
|---|---|
| To Take More Courses/ Electives | 80% |
| To Focus on Fewer Courses at a Time | 80% |
| To Repeat a Course Sooner If Necessary | 73% |
| To Study Subjects in More Depth | 75% |
| For Classes to be More Interesting | 74% |
| To Finish a Course in One Semester | 86% |
| For Teachers to Get to Know Me Better | 55% |
| To Have Fewer Classes and Exams to Prepare for | 88% |

### How successful was block scheduling in these courses?

| Type of Course | Percent Successful or Very Successful | Percent Taking Course |
|---|---|---|
| Vocational | 77% | 80% |
| Science | 76% | 88% |
| English | 76% | 100% |
| Social Studies | 75% | 87% |
| Math | 67% | 92% |
| Art | 80% | 40% |
| Health/P.E. | 89% | 51% |
| Media and Technology | 71% | 25% |
| Foreign Language | 73% | 52% |



Note: Numbers refer to item numbers in questionnaire.

# STUDENT OPINIONS

What are the *best* things about this type of schedule?

16% Less homework and/or do homework in class

What are the *worst* things about this type of schedule?

16% Classes become boring

32% Classes are too long

## EOC Test Scores in Block Scheduled Schools: Comparison of 1992-93 Non-Blocked with 1993-94 Blocked

| Subject | Number of Schools | Number of Students 1992-93 1993-94 | Average Gains Per School | +/- | Average Student Score Before Block | Average Student Score During Block | Average Gains Per Student |
|---|---|---|---|---|---|---|---|
| ELP | 22 | 5,133<br>5,465 | .4 | 10/12 | 43.1 | 43.3 | 0.2 |
| U.S. History | 25 | 4,672<br>4,794 | -0.1 | 10/15 | 41.4 | 41.6 | 0.2 |
| English I | 27 | 5,637<br>6,344 | -0.1 | 12/15 | 66.1 | 65.9 | -0.2 |
| Geometry | 21 | 2,653<br>3,123 | 0.9 | 13/8 | 37.6 | 38.4 | 0.8 |
| Algebra II | 21 | 2,298<br>2,566 | -0.2 | 9/12 | 38.0 | 37.9 | -0.1 |

Note: The +/- column gives the number of schools with an increase in scores followed by the number of schools with a decrease in scores.

**Thought-Provoking Quotes**

"When it's good it's good; when it's bad it's bad."
*student*

"For some students it's an opportunity for teachers to get to know them better, to take more classes, to go into more depth — for others, that 90 minutes is just an opportunity for a longer nap."
*student*

"It's a good idea but does not work because teachers are doing too much cramming."
*student*

"I like this schedule because I can get rid of a bad teacher earlier."
*student*

"The first year is like the first year of teaching."
*teacher*

"I am a better teacher because of this."
*teacher*

"Before I was teaching a subject, now I'm teaching kids."
*teacher*

"For teachers teaching courses with EOC tests, block scheduling becomes more of a challenge since teachers feel the pressure of going from 'beginning to end'."
*teacher*

"I do not want to go back to the old schedule."
*teacher*

"Our teachers would not go back to the old system if given the chance, primarily because of less preparation. Our students really like the system, however the most frequent reasons are (1) less books to carry around (2) we get to do our homework (3) I don't spend as much time in a class I hate. At this point my primary concern is that the teachers and students say they like the block schedule, but not for the right reasons — improved learning, retention etc. I'm hearing the students and teachers say it's more convenient — therefore they prefer it."
*guidance counselor*

"Block scheduling results in a much more professional environment for teachers. We must find a way to make it work."
*administrator*

# Appendix A:

# Catalogue of Organizations of School Time: 255 North Carolina High Schools

# Catalogue of Organizations of School Time: 255 North Carolina High Schools

This catalogue includes schools who returned the *Organization of School Time Survey* prior to June 30, 1994. Schools were asked if they had already implemented or planned to implement any of the variations in school time listed below. Variations in organization of school time included differences in the daily schedule, extensions beyond the regular school day, and differences from the traditional August to June calendar. The years listed in the catalogue refer to the last part of a traditional calendar, e.g. 1992-93 is listed as 93. Years refer to implementation years; programs may have been discontinued. Schools are listed in order by school code. "Alt. School" refers to alternative schools.

| Code | Type of Schedule |
|---|---|
| Block<br>4X4 | *Block Scheduling*–Classes are taught in longer periods which meet for only part of the school year, e.g. for semesters (4X4) or in quarters. (Entire school on this schedule) |
| 7-8<br>Short | *7 or 8 Shortened Class Period Days*–Class periods last fewer than 55 minutes and students take more than 6 classes each day. Classes last the entire school year. |
| Ext.<br>Day | *Extended School Day*–The school day is extended beyond the typical 6-1/2 to 7 hours and/or has more than 6, 55-minute instructional periods plus lunch, e.g. comprehensive high school. |
| A/B | *Alternative Day Schedules or A/B Scheduling*–Courses are offered every other day rather than daily. |
| Semester | *Semester Scheduling*–Credit is offered in 1/2 units so that students can repeat a semester at a time if necessary. |
| Night | *Night School*–Classes are offered at night. |
| Year-<br>Round | *Year-round School*–School year divided into 4 or 5 segments with shorter and more frequent vacation breaks evenly distributed throughout the year. |
| Summer | *Summer School*–Courses are offered either for remediation/repeating or for initial credit to first time takers. |
| Other | Other type of scheduling |

| Code | School Name | Alt. School | Block 4X4 | 7-8 Short | Ext. Day | A/B | Semester | Night | Year-Round | Summer | Other | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | no name given | | 95 | | | | | 93 | | 90 | | |
| | no name given | | 96 | | | | | | | | | |
| | no name given | | 95 | | | | | | | | | |
| 10324 | Eastern Alamance High | | 96 | 91 | | | | | | | | |
| 10348 | Graham High School | | 96 | 91 | 90 | | | | | 94 | | |
| 10400 | Western Alamance High | | 96 | | | | | | | | | |
| 11338 | Hugh Cummings HIgh School | | 95 | | | | | | | | | |
| 11356 | Walter M. Williams High | | | | 93 | | | | | | | |
| 20302 | Alexander Central High | | 95 | | | | | | | | | |
| 50304 | Ashe Central High | | | | | | 90 | | | | | |
| 50336 | Northwest Ashe | | | 90 | | | 90 | | | | | |
| 60302 | Avery County High | | 95 | 91 | | | | | | 90 | | |
| 70304 | Aurora High School | | 96 | | | | | | | 90 | 94 | Banked time for extended activity-tutorial 1-2x week |
| 70324 | Chocowinity High School | | | 92 | 92 | | | | | 90 | | |
| 70330 | Northside High School | | 96 | | | | | | | | | |
| 71324 | Washington High | | 96 | | 94 | | | | | 90 | | |
| 80312 | Bertie High School | | 95 | | | | | | | | | |
| 90316 | Bladenboro High School | | | | | | | | | | | |
| 90364 | Tar Heel Middle/High School | | | | | | | | | 90 | 92 | 7th period for remediation and to makeup absences |
| 100326 | North Brunswick High | | 96 | | 91 | | | 90 | | | | |
| 100344 | South Brunswick High | | 96 | | | | | | | | | |
| 100348 | West Brunswick High | | | | 93 | | | 90 | | 90 | | |
| 110336 | C.D. Owen High | | 94 | | | | | | | | | |
| 110340 | Clyde A. Erwin High | | 94 | | | | | | | | | |
| 110352 | Enka High School | | | | 93 | | | | | 90 | | |
| 110416 | Roberson High School | | 95 | | 93 | | | | | | | |
| 111302 | Asheville High School | | | 91 | 90 | | | | | | 94 | Block schedule for at-rist students within reg. school |
| 120314 | East Burke HIgh School | | 95 | | 94 | | 90 | 90 | | | 90 | 12-week quarter system |
| 120318 | Freedom High School | | 95 | | 93 | | 90 | 93 | | 90 | | |
| 130314 | Concord High | | 96 | | | | | | | | 93 | Banking time by increasing classes to 60 |
| 130324 | Mt. Pleasant High School | | | 92 | 94 | | 94 | | | | 92 | Some 50 minute and some 90 minute courses |
| 130326 | Northwest Cabarrus High | | | | 92 | | | | | | 93 | Banking time for staff development |
| 132304 | A.L. Brown High | | 96 | | 93 | | 94 | 94 | | 90 | | |
| 140348 | Hibriten High | | 96 | | | | 96 | | | | | |

| Code | School Name | Alt. School | Block 4X4 | 7-8 Short | Ext. Day | A/B | Semester | Night | Year-Round | Summer | Other | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 140386 | South Caldwell High School | | 96 | | | | | | | | | |
| 160313 | East Carteret High | | 95 | 91 | 93 | | | | | | | |
| 160344 | West Carteret High | | 96 | | 93 | | | | | | 91 | Macro–4 of 7 courses quarter long for 180 |
| 170316 | Bartlett Yancey | | 94 | | | | | | | 90 | | |
| 180308 | Bandys High | | 94 | | | | | | | 90 | | |
| 180320 | Bunker Hill High | | | | | | | | | | 95 | Block selected course |
| 180340 | Fred T. Foard | | 96 | | | | | | | | | |
| 180348 | Maiden High School | | 94 | | | | 92 | | | | | |
| 180376 | St. Stephens High | | 97 | | 93 | | | | | | | |
| 181322 | Hickory High | | 95 | | | | | | | | | |
| 182316 | Newton Conover High | | 95 | | | | | | 96 | | | |
| 190336 | Jordan Matthews | | 94 | | | | | | | 90 | | |
| 200308 | Andrews High School | | 97 | | | | | | | | | |
| 200312 | Hiwassee Dam School | | 95 | 91 | | | | | | | | |
| 200328 | Murphy High | | 95 | | | | | | | | | |
| 209204 | Cherokee High | | 96 | 94 | 94 | | | | | | | |
| 210312 | John A. Holmes High School | | 96 | | | | | | 97 | | | |
| 220310 | Hayesville High School | | 95 | | | | | | | | | |
| 230312 | Burns High School | | 95 | | | | | | | 90 | | |
| 230324 | Crest Sr. High School | | 95 | | | | | | | | | |
| 231324 | Kings Mountain High School | | 96 | | 92 | | | | | 90 | | |
| 232332 | Shelby High | | | | | | | | | 90 | 94 | Banking time for remediation |
| 240336 | Central Columbus School | | 95 | | | | | | | | | |
| 240344 | East Columbus High | | 95 | | | | | | | 94 | | |
| 240371 | South Columbus High | | 96 | | | | | | | | | |
| 240380 | West Columbus High | | 95 | 94 | 94 | | | | | | | |
| 241316 | Whiteville High School | | 96 | | | | | | | | | |
| 250340 | Havelock High School | | 95 | | | | | | | 91 | 93 | Modified block in required courses with 2 hr. classes |
| 250372 | West Craven High | | | | | | 93 | | | | 93 | Block selected 9th grade courses-110 min. classes |
| 260322 | Douglas Byrd Senior | | 96 | | | | | | | | | |
| 260359 | E.E. Smith | | | | | | | | | | 93 | "Success period" "0 period" |
| 260408 | Pine Forest Senior | | | | 93 | | | | | 90 | 94 | Modified block for selected courses |
| 260424 | Seventy-First Senior High | | | | | | | | | | | |
| 260427 | South View Senior | | 96 | | 94 | | | | | | | |



BEST COPY AVAILABLE

| Code | School Name | Alt. School | Block 4X4 | 7-8 Short | Ext. Day | A/B | Semester | Night | Year-Round | Summer | Other | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 260446 | Terry Sanford High School | | 96 | | | | | | | | | |
| 270999 | Currituck County High | | | | 90 | | 94 | | | 90 | | |
| 280304 | Cape Hatteras School | | | | | | | | | | 95 | 4 1/2 dat week–students 1/2 day –staff |
| 280316 | Manteo HIgh School | | 95 | | | | | | | | | |
| 290308 | Central Davidson | | 94 | | 94 | | | | | | | |
| 290336 | Ledford Sr. High | | 95 | | | | | | | | | |
| 290348 | North Davidson High | | | | 93 | | | | | | | |
| 290365 | South Davidson | | 96 | | 94 | | | | | | 94 | Saturday school |
| 290388 | West Davidson High | | 95 | | | | | | | | | |
| 291336 | Lexington Sr. High | | 95 | | | | | | | | | |
| 292324 | Thomasville HIgh School | | 94 | | 92 | | | | | 90 | | |
| 300312 | Davie HIgh School | | 96 | | | | | | | | | |
| 310344 | East Duplin High School | | 95 | | 93 | | | | | | | |
| 310352 | James Kenan High School | | 96 | 93 | | | | | | | | |
| 310364 | North Duplin Jr./Sr. High | | 96 | 93 | 93 | | | | | | | |
| 310392 | Wallace-Rose Hill High | | 96 | 94 | 93 | | | | | | | |
| 320356 | Northern High School | | | | | | 90 | | | | | |
| 320365 | Riverside High School | | | | | | | | | | 92 | 3 period, 2 hr. blocks every other week (2 days |
| 330328 | North Edgecombe High | | 96 | | | | | | | | | |
| 330350 | Southwest Edgecombe High | | 95 | 91 | | | | | | 90 | | |
| 330358 | Tarboro High School | | 95 | | | | | | | | | |
| 340364 | East Forsyth High School | | | | 95 | | | | | 94 | | |
| 340454 | Mt. Tabor High | | | 95 | | | | | | | | |
| 340478 | Independence High School | | | | 90 | | 91 | | | 90 | | |
| 340486 | Parkland High School | | 93 | | | | 93 | | | 90 | | |
| 340556 | West Forsyth High School | | | | | | | | | | 95 | Elective courses after regular day for credit. |
| 350308 | Bunn High | | 95 | | | | | | | | | |
| 350336 | Louisburg High | | 95 | | | | | | | | | |
| 351308 | Franklinton Jr./Sr. High | | 96 | | | 96 | | | | | | |
| 360336 | Bessemer City | | 96 | | | | | | | | | |
| 360428 | Hunter Huss | | | | 93 | | 92 | | | 90 | 93 | Rebound program with blocks for at-risk students |
| 360470 | North Gaston High | | | | | | | | | | | |
| 380308 | Robbinsville High School | | 91? | 90 | 90 | 90 | 90 | | | 90 | | |
| 390324 | J.F. Webb High School | | | | 93 | | 94 | | | 90 | | |



BEST COPY AVAILABLE

| Code | School Name | Alt. School | Block 4X4 | 7-8 Short | Ext. Day | A/B | Semester | Night | Year-Round | Summer | Other | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 390352 | South Granville High | | | | | 90 | | | | | | |
| 400308 | Greene Centra Highl | | 95 | | 95 | | | | | | 95 | Alternative site for selected students |
| 410319 | T. Wingate Andrews High | | 94 | | | | | | | 90 | | |
| 410355 | James B. Dudley | | | | | | | | | | | |
| 410390 | Northwest Guilford | | | | | | | 93 | | 93 | | |
| 410394 | Grimsley | | | | | | | | | 90 | | |
| 410406 | High Point Central High | | | 92 | | | 94 | | | 90 | | |
| 410484 | Northeast Guilford | | 96 | | 91 | | | | | 90 | 94 | Block 2 days a week for 2 hr. labs |
| 410508 | Page High | | | | | | | | | | | |
| 410544 | Ben L. Smith | | 96 | | | | | | | | | |
| 410556 | Southern Guilford | | | | | 94 | | | | | | |
| 410562 | Southwest High School | | 96 | | 90 | | | | | | | |
| 410595 | Western Guilford High | | | | | | | | | | | |
| 420346 | Northwest Halifax High | | 95 | | 93 | | | | | 94 | | |
| 420358 | Southeast Halifax High | | 96 | | 90 | | | | | 92 | | |
| 421316 | Roanoke Rapids High School | | | | | | | | | 90 | | |
| 422324 | Weldon High School | | 96 | | 93 | | | | | 90 | | |
| 422324 | Weldon High School | | 96 | | 93 | | | | | 90 | | |
| 430378 | Triton High School | | 96 | | | | | | | 90 | | |
| 440378 | Pisgah High School | | | 94 | 93 | | | | | | | |
| 440390 | Tuscola HighSchool | | | 94 | 90 | | 90 | 90 | | | | |
| 450341 | North Henderson | | 95 | | | | | | | 95 | | |
| 450352 | West Henderson High | | 95 | 94 | | | | | | 91 | | |
| 470312 | Hoke County High | | 95 | | 93 | | | | | 92 | | |
| 480316 | Ocracoke | | | 93 | | | | | | 90 | | |
| 490354 | Statesville High School | | | | | | | | | | 90 | Block for selected vocational courses |
| 490362 | South Iredell High | | 97 | | 94 | | 94 | | | | | |
| 490380 | West Iredell High | | 95 | | | | | | | | | |
| 491305 | N.F. Woods Advanced | | | | | | | | 96 | 96 | 96 | Flexible quarter system |
| 491312 | Mooresville Senior High | | 96 | | | | | | 96 | | | |
| 491312 | Mooresville Senior High | | | | | | | | | 90 | | |
| 500316 | Blue Ridge School | | 96 | | | | 94 | | | 90 | | |
| 510324 | Clayton High | | | | | | | | | | | |
| 510376 | Princeton High | | | 90 | | 94 | | | | 90 | | |

| Code | School Name | Alt. School | Block 4X4 | 7-8 Short | Ext. Day | A/B | Semester | Night | Year-Round | Summer | Other | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 530336 | Lee Senior High | | | | | | | | | 90 | | |
| 540315 | Kinston High School | | 95 | | 93 | | 90 | | | 90 | | |
| 540324 | North Lenoir High | | 96 | | 93 | | | | | | | |
| 540336 | South Lenoir High | | 96 | | | | | | | | | |
| 550332 | Lincolnton High School | | 94 | | 91 | | | | | | | |
| 560320 | Franklin High School | | 96 | | | | | | | | | |
| 560332 | Nantahala | | 95 | | | | 95 | | | | | |
| 570318 | Madison High School | | 94 | | | | | | | | | |
| 580344 | Roanoke High | | 95 | | | | | | | | | |
| 580368 | Williamston High | | | 91 | | | | | | | | |
| 590330 | McDowell High | | 95 | | 90 | | | | | | | |
| 600377 | East Mecklenburg | | | 94 | | | 91 | 94 | | 90 | | |
| 600405 | Harding University High | | | | 93 | 93 | | | | 90 | 93 | Saturday school for remediation |
| 600466 | Myers Park High | | | | | 94 | 90 | | | 90 | | |
| 600490 | Olympic High School | | 92 | | | 93 | | | | | | |
| 610334 | Mitchell High School | | 95 | | | 90 | | | | 90 | 90 | 7-period day, 55-min. classes, semester credit |
| 620316 | East Montgomery | | 95 | | 94 | | | | | | 94 | Saturday school for remediation |
| 620340 | West Montgomery High | | 95 | | | | | | | | | |
| 630332 | North Moore High School | | 95 | 93 | 92 | | | | | | | |
| 630336 | Pinecrest High School | | 95 | | | | | | | 90 | | |
| 630360 | Union Pines | | 95 | | | | | | | 90 | | |
| 640350 | Northern Nash | | | | | | | | | | | |
| 640361 | Rocky Mount High | | 96 | | 94 | | | | | 94 | | |
| 640364 | Southern Nash Senior High | | 94 | | 94 | | | | | 90 | | |
| 650326 | E.A. Laney High | | 96 | 91 | 91 | | | | | | | |
| 650352 | New Hanover High School | | 96 | | 92 | | 93 | | | | | |
| 660324 | Northampton-West | | | 90 | | | | | | | | |
| 660336 | Northampton Co. High | | 94 | | 94 | | | | | | | |
| 670320 | Dixon High | | 95 | | | | | | | 90 | | |
| 670324 | Jacksonville High | | | | 95 | | | 94 | | 90 | 94 | Block a few courses. Alg students repeat in spring |
| 670340 | Richlands High School | | 95 | | | | | | | 90 | | |
| 670344 | Southwest High | | 95 | | | | | | | 90 | | |
| 670352 | Swansboro High | | 95 | | | 94 | | | | 90 | | |
| 670364 | White Oak High School | | 95 | | | 94 | | 90 | | 90 | | |

| Code | School Name | Alt. School | Block 4X4 | 7-8 Short | Ext. Day | A/B | Semester | Night | Year-Round | Summer | Other | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 680332 | Orange High School | | 96 | | 95 | | | | | 90 | 94 | Learning Center after school |
| 681308 | Chapel Hill High | | | 90 | | | 90 | 94 | | 90 | 94 | block Tues/Wed A/B traditional M-Th-Fri |
| 690320 | Pamlico County High School | | | | 93 | | | | | 90 | | |
| 700317 | Northeastern High School | | 96 | | 95 | | | | | | | |
| 710326 | Pender High | | | 94 | 93 | | | | | | | |
| 710342 | Topsail High | | 95 | | | | | | | | | |
| 730352 | Person High School | | 94 | | | | | | | | | |
| 740333 | D.H. Conley | | 96 | | | | | | | | | |
| 740344 | Farmville Central | | 96 | | 94 | | | | | 90 | | |
| 740366 | J. H.Rose | | 96 | | | | | | | | | |
| 750318 | Polk County High | | 95 | 90 | | 93 | | | | | | |
| 760318 | Eastern Randolph High | | 95 | 94 | | | | 92 | | 90 | | |
| 760358 | Southwestern Randolph High | | | | | | | | | 90 | | |
| 760380 | Trinity High School | | 95 | | 90 | | | | | 90 | | |
| 761304 | Asheboro High School | | 93 | | | | | 94 | | 90 | | |
| 770348 | Richmond Senior | | 96 | | 90 | | | 90 | | 90 | | |
| 780325 | Fairmont High School | | 95 | | | | | | | 90 | | |
| 780342 | Lu mberton Sr. High | | 95 | | | | | | | | | |
| 780391 | Red Springs High | | 95 | | 94 | | | | | 90 | | |
| 780401 | St. Pauls High | | 95 | 94 | 94 | | | 93 | | 93 | | |
| 790314 | McMichael High | | 95 | 94 | 93 | | | | | | | |
| 790354 | J.M. Morehead High School | | | 94 | | | | | | 90 | | |
| 790366 | Reidsville High School | | 95 | | 92 | | | | | | | |
| 790378 | Rockingham County High | | | 93 | | | | | | 90 | | |
| 800376 | North Rowan High | | | 94 | 91 | | | | | 94 | | |
| 800396 | Salisbury High | | | | | | | | | 90 | | |
| 800408 | West Rowan High | | | 91 | | | | | | 94 | | |
| 810324 | Chase High School | | 95 | 91 | 93 | | | | | 90 | | |
| 810384 | R. S. Central | | 95 | | | | | | | | | |
| 820348 | Hobbten High | | 95 | 93 | | | | | | 91 | | |
| 820349 | Lakewood High | | 95 | 92 | | | | | | | | |
| 820352 | Midway High | | 97 | 92 | 95 | | | | | | | |
| 820388 | Union High School | | 96 | | | | | | | | | |
| 830346 | Scotland High School | | 95 | | 92 | | | | | | | |



BEST COPY AVAILABLE

| Code | School Name | Alt. School | Block 4X4 | 7-8 Short | Ext. Day | A/B | Semester | Night | Year-Round | Summer | Other | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 840332 | North Stanly High School | | | | 93 | | | | | | | |
| 840356 | South Stanly High School | | | | 92 | | | | | | | |
| 840368 | West Stanly High | | | | | | | | | | 93 | Flex scheduling with 7th period |
| 841304 | Albemarle High | | | | | | | | | | | |
| 850332 | North Stokes | | 95 | | | | | | | | | |
| 850352 | South Stokes | | 95 | | | | | 90 | | 90 | | |
| 861308 | Elkin High School | | 94 | | | | | | | | | |
| 870314 | Swain County High | | 96 | 90 | | | | 95 | | 90 | | |
| 880308 | Brevard High School | | 94 | | | | | | | 90 | | |
| 880328 | Rosman High School | | 96 | 90 | 92 | | | | | 90 | | |
| 890340 | Columbia High School | | | 90 | | 93 | | | | | | |
| 900336 | Monroe High | | | | | | | | | | | |
| 900344 | Parkwood High | | | | | | 90 | | | 90 | | |
| 900360 | Sun Valley High School | | 96 | | | | | | | | | |
| 910364 | Southern Vance High | | 95 | | 93 | | 94 | | | 90 | | |
| 920316 | Apex High | | | | | | 95 | 95 | | 90 | | |
| 920318 | Athens Drive | | | | | | 94 | | | | | |
| 920411 | East Wake High | | | | | | 90 | 90 | | 90 | | |
| 920412 | Enloe High School | | | 90 | | | | | | 90 | | |
| 920428 | Fuquay-Varina High | | | | | | | 95 | | | | |
| 920436 | Garner Sr. High | | | | | | | | | 90 | | |
| 920473 | Leesville Road High School | | | | | | | 94 | | 90 | | |
| 920500 | Millbrook High School | | | | | | 95 | 90 | | 90 | | |
| 920552 | Jesse O. Sanderson | | | | | | 90 | | | | 94 | P.E. offered prior to beginning of reg. day |
| 920588 | Wake Forest-Rolesville High | | | | 95 | | | | | | | |
| 930352 | Warren County High | | | | 90 | | | | | | | |
| 940316 | Plymouth High School | | | 95 | | | | | | 95 | | |
| 950336 | Watauga High | | | 92 | | | 90 | | | 90 | 94 | Alternative Day with block for science courses |
| 960324 | Charles B. Aycock | | 96 | | | | | | | | | |
| 960330 | Eastern Wayne High | | 94 | | | | | | | | 92 | Afternoon remediation Reteach/Retest |
| 960372 | Rosewood High | | | | 95 | | | | | 90 | | |
| 970356 | North Wilkes High | | | | | | | 90 | | | 94 | Block for at risk 9th graders in some courses |
| 970388 | West Wilkes High | | 94 | | | | | 90 | | | | |
| 970390 | Wilkes Central High School | | | | 96 | | 90 | 90 | | | | |

| Code | School Name | Alt. School | Block 4X4 | 7-8 Short | Ext. Day | A/B | Semester | Night | Year-Round | Summer | Other | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 980318 | Beddingfield High School | | 95 | | | | | | | | | |
| 980336 | Fike High School | | 95 | | | | | | | | | |
| 980342 | James Hunt High | | 95 | | | | | | | | | |
| 990322 | Forbush High School | | 96 | | | | | | | | | |
| 990326 | Starmount High | | | | 93 | | | | | | | |
| 110350 | Career Education Center | Yes | | | | | | | | | 90 | Vocational classes meeting 2 hrs. each day |
| 250356 | New Bern High | Yes | 97 | | 94 | | | 90 | | 90 | 93 | Remediation block second semester |
| 260388 | Massey Hill Alternative | Yes | | | | | | | | | | |
| 340332 | Career Center | Yes | | | 95 | | 93 | | | | | |
| 600310 | Mayfield Alternative | Yes | | | | | | | | | | |
| 600456 | Teen Age Parents Services | Yes | 93 | 94 | | 93 | | | 96 | | | |
| 640000 | Tar River Learning Center | Yes | | | | | 94 | | | | | |
| 650354 | Lakeside School | Yes | 93 | | | | | 90 | | 90 | | |
| 670337 | Onslow County High School | Yes | 93 | | | | 93 | 90 | | | | |
| 900366 | Union County Career Center | Yes | | | 90 | | | 90 | | 90 | | |
| 920324 | Longview | Yes | 93 | | | | 93 | | | | | |
| 920528 | Phillips High School | Yes | 93 | | 95 | | | 95 | | 90 | | |

# Appendix B: Initial Survey

## Organization of School Time Survey

**North Carolina Department of Public Instruction**

This survey is designed to assess the implementation of alternative approaches to organizing the school day and school year in public high schools in North Carolina. Alternative approaches include any organization of school time that is different from the standard Carnegie unit system based on 180 days of 55-minute class periods, a calendar that is different from September through June, and/or a day that extends beyond the typical early morning to mid-afternoon schedule of 6 periods plus lunch. The results will help us to describe the extent of reform efforts related to the use of time throughout the state. Thank you for taking the time to respond.

School _____

School System _____

1. What grade levels are taught in your school?

   ____ 9–12 ____ 10–12

   ____ other; specify: _____

2. Are all classes and courses in your school organized in the traditional manner, i.e. courses consist of 180 instructional days with class periods that are 55 minutes long with students taking 6 different classes each day/year on a schedule from August to June?

   ____ Yes ____ No

3. If you answered *Yes* to question 2, does your school plan to implement an alternative schedule in the future?

   ____ Yes ____ No

4. Besides changes in schedule, has your school implemented any other reforms in programs, curricular goals, instructional strategies, and/ or site-based management?

   ____ Yes ____ No

   If *Yes*, please describe these reforms below.

5. Which of the following alternative approaches to organizing time has been (or is planned to be) implemented in your school? (Check all that apply.)

| Type of Schedule | Implementation Year | |
|---|---|---|
| ____*Block Scheduling*–Classes are taught in longer periods which meet for only part of the school year, e.g. for semesters (4X4) or in quarters. | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |
| ____*7 or 8 Shortened Class Period Days*–Class periods last fewer than 55 minutes and students take more than 6 classes each day. Classes last the entire school year. | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |
| ____*Extended School Day*–The school day is extended beyond the typical 6-1/2 to 7 hours and/or has more than 6, 55-minute instructional periods plus lunch, e.g. comprehensive high school. | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |
| ____*Alternative Day Schedules or A/B Scheduling*–Courses are offered every other day rather than daily. | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |
| ____*Semester Scheduling*–Credit is offered in 1/2 units so that students can repeat a semester at a time if necessary. | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |
| ____*Night School*–Classes are offered at night. | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |
| ____*Year-round School*–School year divided into 4 or 5 segments with shorter and more frequent vacation breaks evenly distributed throughout the year. | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |
| ____*Summer School*–Courses are offered either for remediation/repeating or for initial credit to first time takers. | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |
| ____Other type of scheduling; please describe: | ___before 1990<br>___1990-91<br>___1991-92<br>___1992-93<br>___1993-94 | ___1994-95<br>___1995-96<br>___1996-97<br>___after 1996-97 |

Please answer questions 6 through 10 below as they apply to a particular type of alternative schedule which you have implemented or plan to implement in the future. If you checked more that one type of schedule for question 5 on page 2, complete these questions for *each* type of schedule. Another copy of questions 6–10 is on page 4. If you need another, please photocopy page 3 and attach it to your survey.

Type of Schedule: _____

6. Please describe the schedule in detail below, including both the times courses are offered and the types of courses offered. If you have a printed copy of the schedule, you may attach it to the survey.

7. In making this change, what outcomes and benefits did you, or do you, expect?

8. Has your school or school system provided, or do you plan to provide, special staff development opportunities for teachers involved in the scheduling change?

____ Yes ____ No

9. If *Yes*, please describe the staff development opportunities below.

10. What have been the shortcomings and/or disappointments, if any, in making the scheduling change?

Please complete this page only if you have more than one type of alternative schedule.

Type of Schedule: _____

6. Please describe the schedule in detail below, including both the times courses are offered and the types of courses offered. If you have a printed copy of the schedule, you may attach it to the survey.

7. In making this change, what outcomes and benefits did you, or do you, expect?

8. Has your school or school system provided, or do you plan to provide, special staff development opportunities for teachers involved in the scheduling change?

____ Yes ____ No

9. If *Yes*, please describe the staff development opportunities below.

10. What have been the shortcomings and/or disappointments, if any, in making the scheduling change?

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Thank you for taking the time to complete the survey. Please return your survey to in the enclosed, preadressed and prepaid envelope to: Dr. Joe Haenn, NC Education Building, 301 N. Wilmington Street, Raleigh, NC 27601-2825, by **May 20, 1994**.

# Appendix C:
# Follow-Up Surveys

## Block Scheduling Student Survey

**North Carolina Department of Public Instruction**

This survey is designed to assess the opinions of students concerning block scheduling in their schools. Block scheduling, sometimes called **4x4**, is when students take fewer courses each quarter or semester and class periods are longer, e.g. 90 minutes. Your opinions are very important to help us better understand issues related to how block scheduling works in your school and in the state. Your responses are strictly confidential, and you will not be identified in any way. Surveys will be identified only by building code numbers. Thank you for taking the time to respond.

1. What is your grade level classification this year? (Check only one.)

   _____ 9th grader  _____ 11th grader

   _____ 10th grader  _____ 12th grader

2. What are your plans after high school? (Check only one.)

   _____ work full time  _____ attend a four-year college

   _____ enter the military  _____ attend a community college

   _____ other; please describe_____

3. For the subject areas listed below, please rate how successful block scheduling has been for you *this year*. (Circle one number in each row.)

| Subject Areas/Types of Courses | Not Very Successful | | | | Very Successful | Did Not Take This Year |
|---|---|---|---|---|---|---|
| a. vocational courses | 0 | 1 | 2 | 3 | 4 | 9 |
| b. science courses | 0 | 1 | 2 | 3 | 4 | 9 |
| c. English courses | 0 | 1 | 2 | 3 | 4 | 9 |
| d. social studies courses | 0 | 1 | 2 | 3 | 4 | 9 |
| e. math courses | 0 | 1 | 2 | 3 | 4 | 9 |
| f. art courses, including drama and music | 0 | 1 | 2 | 3 | 4 | 9 |
| g. health and P.E. courses | 0 | 1 | 2 | 3 | 4 | 9 |
| h. media and technology courses | 0 | 1 | 2 | 3 | 4 | 9 |
| i. foreign languages | 0 | 1 | 2 | 3 | 4 | 9 |

4. In general, do you find block scheduled courses to be more interesting, less interesting, or about the same as regularly-scheduled courses (year long with class periods less than 1 hour)?

   _____ more interesting

   _____ about the same

   _____ less interesting

(over)

5. Block scheduling offers some special opportunities for students. Please use the list below to tell us how important these things are to you. Space has been allowed at the bottom of the list to add any others that you wish. (Circle one number in each row.)

| | Not Important | | | | Very Important |
|---|---|---|---|---|---|
| a. a chance to take more courses and/or electives each year | 0 | 1 | 2 | 3 | 4 |
| b. a chance to focus on fewer courses at a time | 0 | 1 | 2 | 3 | 4 |
| c. a chance to repeat a course sooner if necessary | 0 | 1 | 2 | 3 | 4 |
| d. a chance to study subjects in more depth | 0 | 1 | 2 | 3 | 4 |
| e. a chance for classes to be more interesting | 0 | 1 | 2 | 3 | 4 |
| f. a chance to finish a course in one semester | 0 | 1 | 2 | 3 | 4 |
| g. a chance for teachers to get to know me better | 0 | 1 | 2 | 3 | 4 |
| h. a chance to have fewer classes and exams to prepare for | 0 | 1 | 2 | 3 | 4 |
| i. other; please describe _____ | 0 | 1 | 2 | 3 | 4 |

6. Which of the following would you prefer at your school? (Check only one.)

_____ keep the schedule we have now

_____ keep the schedule we have now for some courses, but return to the old schedule for other courses

_____ return to the old schedule

_____ other; please describe:_____

7. What are the *best* things about this type of schedule?

8. What are the *worst* things about this type of schedule?

School Code: _____

## Block Scheduling Teacher Survey
### North Carolina Department of Public Instruction

This survey is designed to assess the opinions of teachers concerning the implementation of block scheduling in their schools. Your opinions are very important to help us better understand issues related to the implementation of block scheduling in your school and in the state. Your responses are strictly confidential, and you will not be identified in any way. Surveys will be identified only by building code numbers. Thank you for taking the time to respond.

1. How many years have you been a teacher?

   ____ less than 5 years ____ 5 to 9 years ____ 10 to 20 years
   ____ 21 to 30 years ____ over 30 years

2. How many years have you worked at your present school or building?

   ____ less than 1 year ____ 2 to 3 years ____ 4 to 9 years
   ____ 10 to 20 years ____ over 20 years

3. What types of courses are you teaching this year? (Check all that apply.)

   ____ vocational courses ____ science courses
   ____ English courses ____ social studies courses
   ____ math courses ____ arts education courses
   ____ health or P.E. courses ____ media and technology courses
   ____ foreign languages ____ other; please specify:

4. Before your school implemented block scheduling, on average how many courses, course preparations, and students did you teach each year? (Fill in the blank for each item below.)

   I taught _____ courses. I had _____ course preparations.
   I taught _____ students.

5. How many courses, course preparations, and students did you teach each semester or quarter this year? (Fill in all four only if only if you are in a block schedule which changes each quarter.)

   *First Semester or Quarter:*
   ____ courses
   ____ course preparations
   ____ students

   *Second Semester or Quarter:*
   ____ courses
   ____ course preparations
   ____ students

   *Third Quarter:*
   ____ courses
   ____ course preparations
   ____ students

   *Fourth Quarter:*
   ____ courses
   ____ course preparations
   ____ students

6. Did you have any special staff development to help with the change to the longer class periods of a blocked schedule?

   ____ Yes ____ No

   If *Yes*, what kinds of staff development?

School Code _____
Form A

For each of the following statements concerning the implementation of block scheduling in your school, please use the scale below to indicate how you feel presently. Circle one number in each row.

**0 Strongly disagree**
**1 Disagree somewhat**
**2 No opinion**
**3 Agree somewhat**
**4 Strongly agree**

| | | Disagree | | | | Agree |
|---|---|---|---|---|---|---|
| 7. | I assign more written work and papers since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 8. | I think that I am adequately trained to teach in a block schedule. | 0 | 1 | 2 | 3 | 4 |
| 9. | Most of my students like block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 10. | We should have taken more time to plan before we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 11. | Under block scheduling I can spend more time focusing on students who need extra help. | 0 | 1 | 2 | 3 | 4 |
| 12. | I am comfortable with my instructional practices since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 13. | I have been encouraged to try new teaching strategies in my classroom. | 0 | 1 | 2 | 3 | 4 |
| 14. | The state curriculum needs to be revised to accommodate block schedules. | 0 | 1 | 2 | 3 | 4 |
| 15. | My students are more interested in the subject matter since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 16. | I don't have adequate resources to implement block scheduling well in my classroom. | 0 | 1 | 2 | 3 | 4 |
| 17. | I worry that I have to present too much material too quickly. | 0 | 1 | 2 | 3 | 4 |
| 18. | My school provided me with a good sense of why we were changing to block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 19. | There was nothing wrong with the old schedule, so I don't know why we had to change. | 0 | 1 | 2 | 3 | 4 |
| 20. | The staff development we had before we implemented block scheduling was very helpful. | 0 | 1 | 2 | 3 | 4 |
| 21. | I find it difficult to teach all the *Standard Course of Study* in the allocated time of block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 22. | The administrators in my school system are supportive of block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 23. | I believe block scheduling is a better way to organize school time. | 0 | 1 | 2 | 3 | 4 |

| | | Disagree | | | | Agree |
|---|---|---|---|---|---|---|
| 24. | I can provide more quality instruction with the longer class periods. | 0 | 1 | 2 | 3 | 4 |
| 25. | Students have had difficulty recovering from absences during block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 26. | My students are learning more since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 27. | With block scheduling I can more efficiently use class time. | 0 | 1 | 2 | 3 | 4 |
| 28. | I have found it easier to use new teaching strategies since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 29. | Block scheduling has been successful in my school. | 0 | 1 | 2 | 3 | 4 |
| 30. | I was a strong advocate for block scheduling from the beginning. | 0 | 1 | 2 | 3 | 4 |
| 31. | I have difficulty maintaining student interest for the entire period since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 32. | I could have used more staff development before we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 33. | The teaching methods I have always used work better in a block-scheduled course. | 0 | 1 | 2 | 3 | 4 |
| 34. | Most teachers in my school are comfortable with the implementation of block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 35. | One of the most difficult things about the change to block scheduling is that I had to change most of my lesson plans. | 0 | 1 | 2 | 3 | 4 |
| 36. | I worry that students don't learn as much as they did under a traditional schedule. | 0 | 1 | 2 | 3 | 4 |
| 37. | I would prefer to return to a traditional schedule. | 0 | 1 | 2 | 3 | 4 |
| 38. | I have had to change my ways of teaching since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 39. | My principal is supportive of block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 40. | Students have difficulty sitting through the longer periods of block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 41. | I think our block schedule does <u>not</u> need any changes. | 0 | 1 | 2 | 3 | 4 |
| 42. | Students can focus better under block scheduling because they have fewer courses. | 0 | 1 | 2 | 3 | 4 |
| 43. | I give more open-ended and/or essay tests since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 44. | Under block scheduling I can get to know students better. | 0 | 1 | 2 | 3 | 4 |

| | Disagree | | | | Agree |
|---|---|---|---|---|---|
| 45. There is not enough time for students to really grasp all the course objectives under block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 46. I have had more discipline problems in my classes since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 47. I am supportive of the philosophy of block scheduling but am still having problems with implementation in my classroom. | 0 | 1 | 2 | 3 | 4 |
| 48. It is difficult to teach for the longer periods of block schedules. | 0 | 1 | 2 | 3 | 4 |
| 49. Teachers were adequately involved in the decision-making to change to block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 50. Students earning completing their credits early under block scheduling should be allowed to graduate early. | 0 | 1 | 2 | 3 | 4 |

51. About how much homework do you assign each night? (Check one.)

____ less than 15 minutes ____ 15–30 minutes

____ 31–45 minutes ____ 46–60 minutes

____ 61–90 minutes ____ more than 1 1/2 hours

52. What types of homework assignments do you give? (Check all that apply.)

____ reading in the textbook ____ problems or questions in the textbook

____ reading other books ____ data collection or interviews

____ individual projects ____ collaborative projects

____ library research ____ other; specify: _____

53. Do you give different kinds of homework in block scheduling than you did in a traditional schedule?

____ Yes ____ No

If *Yes*, what types of assignments do you now give that are different?

54. What is working well in block scheduling for you?

55. If you were to start over again, what would you do differently?

---

Thank you for taking the time to complete the survey. If you have any other comments or concerns about block scheduling, write them on a separate sheet and attach it to this survey. Please return your survey in the attached, preadressed and prepaid envelope to: Dr. Joe Haenn, NC Education Building, 301 N. Wilmington Street, Raleigh, NC 27601-2825, by **June 15, 1994**.

## Block Scheduling Teacher Survey
### North Carolina Department of Public Instruction

This survey is designed to assess the opinions of teachers concerning the implementation of block scheduling in their schools. Your opinions are very important to help us better understand issues related to the implementation of block scheduling in your school and in the state. Your responses are strictly confidential, and you will not be identified in any way. Surveys will be identified only by building code numbers. Thank you for taking the time to respond.

1. How many years have you been a teacher?

   ____ less than 5 years ____ 5 to 9 years ____ 10 to 20 years
   ____ 21 to 30 years ____ over 30 years

2. How many years have you worked at your present school or building?

   ____ less than 1 year ____ 2 to 3 years ____ 4 to 9 years
   ____ 10 to 20 years ____ over 20 years

3. What types of courses are you teaching this year? (Check all that apply.)

   ____ vocational courses ____ science courses
   ____ English courses ____ social studies courses
   ____ math courses ____ arts education courses
   ____ health and P.E. courses ____ media and technology courses
   ____ foreign languages ____ other; please specify:

4. Before your school implemented block scheduling, on average how many courses, course preparations, and students did you teach each year? (Fill in the blank for each item below.)

   I taught _____ courses. I had _____ course preparations.
   I taught _____ students.

5. How many courses, course preparations, and students did you teach each semester or quarter this year? (Fill in all four only if you are in a block schedule which changes each quarter.)

   *First Semester or Quarter:*
   ____ courses
   ____ course preparations
   ____ students

   *Second Semester or Quarter:*
   ____ courses
   ____ course preparations
   ____ students

   *Third Quarter:*
   ____ courses
   ____ course preparations
   ____ students

   *Fourth Quarter:*
   ____ courses
   ____ course preparations
   ____ students

6. Did you have any special staff development to help with the change to the longer class periods of a blocked schedule?

   ____ Yes ____ No

   If *Yes*, what kinds of staff development?

School Code _____

Form B

7. What do you believe to be the *strong* points of block scheduling ? (Check all that apply.)

a. _____ I can get to know students better.
b. _____ I have fewer preparations.
c. _____ I have fewer students at a time.
d. _____ I can use class time more effectively.
e. _____ I can use more high quality instructional practices.
f. _____ I can assign more homework each night.
g. _____ Teachers can teach more courses each year.
h. _____ Classes are smaller.
i. _____ Students have fewer classes and exams to prepare for.
j. _____ I have longer and/or more planning periods.
k _____ It is easier to maintain student interest.
l _____ I can make different types of assignments.
m. _____ Students can take more courses each year
n. _____ Less time is taken for classes to change and get settled.
o. _____ Fewer textbooks need to be purchased.
p. _____ More electives can be offered.
q. _____ Students can immediately retake courses they fail.
r. _____ Students have more time to visit guidance counselors.
s. _____ It is easier to increase individualized instruction.
t. _____ Other; please specify: _____
u. _____ Other; please specify: _____
v. _____ Other; please specify: _____

8. What do you believe to be the *weak* points of block scheduling ? (Check all that apply).

a. _____ It is difficult to maintain student interest.
b. _____ Students have difficulty in recovering from absences.
c. _____ It is difficult to teach the long class periods.
d. _____ It is too intense for students.
e. _____ I cannot teach all the *Standard Course of Study* in the allotted time.
f. _____ I cannot assign as much homework as before.
g. _____ It requires too many changes in my lesson plans.
h. _____ There is not enough time for students to really grasp all the course objectives.
i. _____ It is difficult to schedule AP courses.
j. _____ It is difficult to accommodate transfer students.
k. _____ Other; please specify: _____
l. _____ Other; please specify: _____
m. _____ Other; please specify: _____

9. Use the scale below to indicate how often you use the following types of instructional practices in your classroom. Circle one number in each row.

**0 I do not use this type of instructional practice.**
**1 I use this type of practice occasionally.**
**2 I use this type of instructional practice on a regular basis.**

| | | Use of Practice | | |
|---|---|---|---|---|
| a. | cooperative learning | 0 | 1 | 2 |
| b. | long term projects (last more than 1 week) | 0 | 1 | 2 |
| c. | Socratic dialogue | 0 | 1 | 2 |
| d. | peer teaching | 0 | 1 | 2 |
| e. | lecturing | 0 | 1 | 2 |
| f. | group discussion | 0 | 1 | 2 |
| g. | performance assessments | 0 | 1 | 2 |
| h. | subject matter integration | 0 | 1 | 2 |
| i. | instructional focus on thinking/problem solving | 0 | 1 | 2 |
| j. | students reading in class | 0 | 1 | 2 |
| k. | students doing individual seat work in class | 0 | 1 | 2 |
| l. | guest lecturers | 0 | 1 | 2 |
| m. | computer-related activities | 0 | 1 | 2 |
| n. | laboratory work | 0 | 1 | 2 |
| o. | team teaching | 0 | 1 | 2 |
| p. | role-playing or simulations | 0 | 1 | 2 |
| q. | students conducting research | 0 | 1 | 2 |
| r. | field trips | 0 | 1 | 2 |
| s. | multi-media presentations | 0 | 1 | 2 |
| t. | telecomputing (e.g. E-mail, Internet, teleconferencing) | 0 | 1 | 2 |
| u. | students doing homework in class | 0 | 1 | 2 |
| v. | student-led conferencing | 0 | 1 | 2 |
| w. | volunteer teacher assistants | 0 | 1 | 2 |
| x. | other; specify:_____ | 0 | 1 | 2 |
| y. | other; specify:_____ | 0 | 1 | 2 |

10. Who initiated the change to block scheduling in your school? (Check only one.)

| | |
|---|---|
| ____ the central office | ____ the school board |
| ____ the principal | ____ a school-based committee of teachers |
| ____ a school-based committee that included parents | ____ other; specify:_____ |

11. When were teachers involved in the decision-making? (Check only one.)

____ at the beginning ____ during the process ____ at the end

12. For each of the following, please use the scale below to indicate the effect you believe block scheduling will have on the item listed. Circle one number in each row.

I believe block scheduling will have a
**0 strong negative effect**
**1 moderate negative effect**
**2 no effect**
**3 moderate positive effect**
**4 strong positive effect**
on:

*Note that positive effects are the educationally desirable outcomes, not just an increase in the rate. For example, a positive effect on the number of drop outs would reduce the drop out rate.*

| | | **Negative** | | | | **Positive** |
|---|---|---|---|---|---|---|
| a. | student attendance. | 0 | 1 | 2 | 3 | 4 |
| b. | student tardiness. | 0 | 1 | 2 | 3 | 4 |
| c. | student achievement on state or other standardized tests. | 0 | 1 | 2 | 3 | 4 |
| d. | student grades. | 0 | 1 | 2 | 3 | 4 |
| e. | student discipline. | 0 | 1 | 2 | 3 | 4 |
| f. | the number of students retained in course. | 0 | 1 | 2 | 3 | 4 |
| g. | the number of drop outs. | 0 | 1 | 2 | 3 | 4 |
| h. | student in-depth knowledge of subject matter. | 0 | 1 | 2 | 3 | 4 |
| i. | student higher order thinking about the subject matter. | 0 | 1 | 2 | 3 | 4 |
| j. | student problem solving ability. | 0 | 1 | 2 | 3 | 4 |
| k. | student retention of subject matter | 0 | 1 | 2 | 3 | 4 |
| l. | student stress | 0 | 1 | 2 | 3 | 4 |
| m. | teacher stress | 0 | 1 | 2 | 3 | 4 |
| n. | other; please specify: _____ | 0 | 1 | 2 | 3 | 4 |
| o. | other; please specify: _____ | 0 | 1 | 2 | 3 | 4 |

13. What is working well in block scheduling for you?

14. What advice would you give to other teachers whose schools will implement block scheduling in the future?

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Thank you for taking the time to complete the survey. If you have any other comments or concerns about block scheduling, write them on a separate sheet and attach it to this survey. Please return your survey in the attached, preadressed and prepaid envelope to: Dr. Joe Haenn, NC Education Building, 301 N. Wilmington Street, Raleigh, NC 27601-2825, by **June 15, 1994**.

**Block Scheduling School Administrative Staff/Guidance Counselor Survey**
**North Carolina Department of Public Instruction**

This survey is designed to assess the opinions of school administrative staff and guidance counselors concerning the implementation of block scheduling in their schools. Your opinions are very important to help us better understand issues related to the implementation of block scheduling in your school and in the state. Your responses are strictly confidential, and you will not be identified in any way. Surveys will be identified only by building code numbers. Thank you for taking the time to respond.

1. How many years have you been in the field of education?

_____ less than 5 years
_____ 5 to 9 years
_____ 10 to 20 years
_____ 21 to 30 years
_____ over 30 years

2. How many years have you worked at your present school or building?

_____ less than 1 year
_____ 2 to 3 years
_____ 4 to 9 years
_____ 10 to 20 years
_____ over 20 years

3. What is your current job title?

_____ Principal
_____ Guidance Counselor
_____ Assistant Principal
_____ Other; specify:_____

4. Who initiated the change to block scheduling in your school?

_____ the central office
_____ the principal
_____ a school-based committee of teachers
_____ a school-based committee that included parents
_____ other; specify:_____

5. Do you think that block scheduling works better in some subjects than in others?

_____ Yes
_____ No

If *Yes*, which ones? (Check all that apply.)

_____ vocational courses
_____ English courses
_____ math courses
_____ health and P.E. courses
_____ foreign languages
_____ science courses
_____ social studies courses
_____ arts education courses
_____ media and technology courses
_____ other; specify:_____

School Code _____

6. What do you believe to be the *strong* points of block scheduling ? (Check all that apply.)

a. _____ Teachers can get to know students better.
b. _____ Teachers have fewer preparations.
c. _____ Teachers have fewer students at a time.
d. _____ Teachers can use class time more effectively.
e. _____ Teachers can use more high quality instructional practices.
f. _____ Teachers can assign more homework each night.
g. _____ Teachers can teach more courses each year.
h. _____ Classes are smaller.
i. _____ Students have fewer classes and exams to prepare for.
j. _____ Teachers have longer and/or more planning periods.
k. _____ It is easier for teachers to maintain student interest.
l. _____ Teachers can make different types of assignments.
m. _____ Students can take more courses each year
n. _____ Less time is taken for classes to change and get settled.
o. _____ Fewer textbooks need to be purchased.
p. _____ More electives can be offerred.
q. _____ Students can immediately retake courses they fail.
r. _____ Students have more time to visit guidance counselors.
s. _____ It is easier to increase individualized instruction.
t. _____ Other; please specify: _____
u. _____ Other; please specify: _____
v. _____ Other; please specify: _____

7. What do you believe to be the *weak* points of block scheduling ? (Check all that apply).

a. _____ It is difficult for tachers to maintain student interest.
b. _____ Students have difficulty in recovering from absences.
c. _____ It is difficult for teachers to teach the long class periods.
d. _____ It is too intense for students.
e. _____ Teachers cannot teach all the *Standard Course of Study* in the allotted time.
f. _____ Teachers cannot assign as much homework as before.
g. _____ It requires too many changes in teacher's lesson plans.
h. _____ There is not enough time for students to really grasp all the course objectives.
i. _____ It is difficult to schedule AP courses.
j. _____ It is difficult to accommodate transfer students.
k. _____ Other; please specify: _____
l. _____ Other; please specify: _____
m. _____ Other; please specify: _____

8. For each of the following, please use the scale below to indicate the effect you believe block scheduling will have on the item listed. Circle one number in each row.

I believe block scheduling will have a

**0 strong negative effect**
**1 moderate negative effect**
**2 no effect**
**3 moderate positive effect**
**4 strong positive effect**

on:

*Note that positive effects are the educationally desirable outcomes, not just an increase in the rate. For example, a positive effect on the number of drop outs would reduce the drop out rate.*

| | **Negative** | | | | **Positive** |
|---|---|---|---|---|---|
| a. student attendance. | 0 | 1 | 2 | 3 | 4 |
| b. student tardiness. | 0 | 1 | 2 | 3 | 4 |
| c. student achievement on state or other standardized tests. | 0 | 1 | 2 | 3 | 4 |
| d. student grades. | 0 | 1 | 2 | 3 | 4 |
| e. student discipline. | 0 | 1 | 2 | 3 | 4 |
| f. the number of students retained in course. | 0 | 1 | 2 | 3 | 4 |
| g. the number of drop outs. | 0 | 1 | 2 | 3 | 4 |
| h. student stress. | 0 | 1 | 2 | 3 | 4 |
| i. teacher stress. | 0 | 1 | 2 | 3 | 4 |
| j. student in-depth knowledge of subject matter. | 0 | 1 | 2 | 3 | 4 |
| k. student higher order thinking about the subject matter. | 0 | 1 | 2 | 3 | 4 |
| l. student problem solving ability. | 0 | 1 | 2 | 3 | 4 |
| m. student retention of subject matter | 0 | 1 | 2 | 3 | 4 |
| n. other; please specify:_____ | 0 | 1 | 2 | 3 | 4 |
| o. other; please specify:_____ | 0 | 1 | 2 | 3 | 4 |
| p. other; please specify:_____ | 0 | 1 | 2 | 3 | 4 |

For each of the following statements concerning the implementation of block scheduling in your school, please use the scale below to indicate how you feel presently. Circle one number in each row.

**0 Strongly disagree**
**1 Disagree somewhat**
**2 No opinion**
**3 Agree somewhat**
**4 Strongly agree**

| | | Disagree | | | | Agree |
|---|---|---|---|---|---|---|
| 9. | I am supportive of the philosophy of block scheduling but we are still having problems with implementation in our school. | 0 | 1 | 2 | 3 | 4 |
| 10. | Most of the students in our school like block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 11. | We should have taken more time to plan before we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 12. | I have encouraged teachers to try new teaching strategies in their classrooms. | 0 | 1 | 2 | 3 | 4 |
| 13. | The state curriculum needs to be revised to accommodate block schedules. | 0 | 1 | 2 | 3 | 4 |
| 14. | We don't have adequate resources to implement block scheduling well in our school. | 0 | 1 | 2 | 3 | 4 |
| 15. | I worry that teachers have to present too much material too quickly. | 0 | 1 | 2 | 3 | 4 |
| 16. | There was nothing wrong with the old schedule, so I don't know why we had to change. | 0 | 1 | 2 | 3 | 4 |
| 17. | The staff development we had before we implemented block scheduling was very helpful for our teachers. | 0 | 1 | 2 | 3 | 4 |
| 18. | I believe block scheduling is a better way to organize school time. | 0 | 1 | 2 | 3 | 4 |
| 19. | Teachers can provide more quality instruction with the longer class periods. | 0 | 1 | 2 | 3 | 4 |
| 20. | The administrators in my school system are supportive of block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 21. | Students are learning more since we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 22. | With block scheduling teachers can more efficiently use class time. | 0 | 1 | 2 | 3 | 4 |
| 23. | I was a strong advocate for block scheduling from the beginning. | 0 | 1 | 2 | 3 | 4 |

| | | Disagree | | | | Agree |
|---|---|---|---|---|---|---|
| 24. | We should have provided more staff development before we implemented block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 25. | Students have had difficulty recovering from absences during block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 26. | Most teachers in our school are comfortable with the implementation of block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 27. | Student achievement will improve under block scheduling *only* if teachers change their instructional practices. | 0 | 1 | 2 | 3 | 4 |
| 28. | I worry that students don't learn as much as they did under a traditional schedule. | 0 | 1 | 2 | 3 | 4 |
| 29. | I would prefer to return to a traditional schedule. | 0 | 1 | 2 | 3 | 4 |
| 30. | Students have difficulty sitting through the longer periods of block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 31. | I think our block schedule does *not* need any changes. | 0 | 1 | 2 | 3 | 4 |
| 32. | Under block scheduling teachers can get to know students better. | 0 | 1 | 2 | 3 | 4 |
| 33. | There is not enough time for students to really grasp all the course objectives under block scheduling. | 0 | 1 | 2 | 3 | 4 |
| 34. | Students can focus better under block scheduling because they have fewer courses. | 0 | 1 | 2 | 3 | 4 |
| 35. | Under block scheduling guidance counselors can get to know students better. | 0 | 1 | 2 | 3 | 4 |
| 36. | Students earning enough credits should be allowed to graduate early. | 0 | 1 | 2 | 3 | 4 |

37. What is working well in block scheduling in your school?

38. What advice would you give to other schools which will implement block scheduling in the future?

39. If you were to start over again, what would you do differently?

40. Please use the space below to make any other comments or concerns that you have about block scheduling.

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Thank you for taking the time to complete the survey. Please return your survey in the attached, preadressed and prepaid envelope to Dr. Joe Haenn, NC Education Building, 301 N. Wilmington Street, Raleigh, NC 27601-2825, by **June 15, 1994.**

# Appendix D: Article

# TIME TO LEARN
## THE PROS AND CONS OF ALTERNATIVE HIGH SCHOOL SCHEDULES

(Western Region News, NCCTM CENTROID, Spring, 1994)

The goals of the North Carolina Mathematics and Science Coalition[1] are being published in their *Shared Vision for Mathematics and Science Education in North Carolina.* Recent developments in our state are having a direct impact on the first two of their goals:

1) Expect success of all students.
2) Provide time to teach and time to learn.

In February, 1991, the State Board of Education increased the graduation requirements from two courses to three in mathematics, science, and social studies. The University of North Carolina system requires Algebra I, Algebra II, and either Geometry or an advanced mathematics course with an Algebra II prerequisite. This new requirement had little impact on the mathematics education of most of our college bound students. However, it required a 50% increase in math, science, and social studies for many other students who had been taking only the minimum number of required courses in these core disciplines. ("Core disciplines" refers to those subject areas in which the state requires three or four credits for graduation: English, Mathematics, Science, and Social Sudies.) Though the Algebra I graduation requirement included in the State Board's '91 decision has been somewhat controversial, the new policy has forced us to raise our expectations for many students. The 50% increase in math, science, and social studies course work creates significant opportunities for improving students' education in these core disciplines. At a time when most high schools offered 6 classes per day and 6 credits per year, the new policy caused an appropriate shift to increase required coursework in the core disciplines from 42% of a student's class time to 54%, from 10 to 13 credits of the possible 24. Besides the required course in health and physical education, the new policy still left room for ten elective courses, a very generous 42% of a student's total coursework.

At the same time, implementation of the new policy began to intensify an existing problem in our high schools. Taking one additional course in math, science, and social studies pulled many of our non-college bound students out of three elective courses. That left many of our faculty outside these core disciplines with even smaller classes. Enrollment in the fine arts suffered in many schools. Some high schools were in danger of losing allotted vocational positions due to low enrollment. This

situation is one of the reasons for the recent interest in alternative schedules for high schools in our state. Since the allotments of teaching positions in high schools are made in distinct classifications, principals do not have complete flexibility to adjust staff assignments to subject areas on the basis of demand. These constraints have resulted in inequities in class sizes that were compounded by the new state graduation requirements.

Expanding to a seven period day was an obvious and simple antidote for the problem. By reducing each of the existing class periods by five to ten minutes, a school can add a seventh period. Over four years students gain four additional elective courses, and the loss created by the State Board's '91 decision is more than compensated for. Disadvantages of the seven period day are a loss of 15 hours of instructional time per course for each five-minute reduction in daily class time, and a shorter planning period for teachers having six, rather than five classes to prepare for. Class time in the required core diciplines is reduced to 46% and free electives increased to 50%. Some schools on the seven period day are now opting for larger class sizes in return for five classes and two planning periods for teachers.

During the 1992-93 school year, three high schools in North Carolina adopted a more radical change in scheduling, the four-period day. First implemented at Pagosa Springs High School in Colorado in 1989-90, then at Wasson High in Colorado Springs in 1990-91, the four-period day is a popular option that is sweeping our state. According to the Department of Public Instruction, 46 high schools have adopted the four-period day this year and that number is expected to double for the 1994-95 school year. There are some clear advantages. With this schedule, students can complete four "compressed" courses during the fall term, another four in the spring, with a possible 32 credits over four years. With just three classes each term, teachers are likely to see no more than 90 students per day rather than up to 150 or 180 students with the six or seven-period day. Teachers' planning time is increased by more than 50%. At the same time, this schedule allows teachers to teach six classes per year rather than five under the traditional six-period day. The students' day, with just four courses rather than six or seven is less fragmented, their studies potentially more focused. The 90-minute class period, proponents argue, is more suitable for the extended discussions, lab activities and small group work recommended in much school reform literature. Advanced Placement courses can be offered over two terms, with 90

minutes per day all year. Some schools on this new schedule are reporting improved attendance and fewer drop-outs and discipline problems. These are the main advantages of the four-period day.

With its wave of popularity, any disadvantages of the four-period day have received little attention. There are some. Students lose 30 hours of class time in each course, a loss of 90 hours in the required mathematics courses and a total loss of 390 hours in the required thirteen-course academic core when compared to the six-period day. Students have only 90 potential homework assignments in each course rather than 180. Some science teachers have reported that while there is more time in the day for labs there is less time in the course for that purpose. While school systems that have adopted this alternative have increased the number of credits required for graduation, none to my knowledge has increased requirements in the core disciplines. The result is that only 13 of 32 courses over four years, less than 41%, are required in the core academic disciplines. At the same time the number of free electives has been increased by 80%, from 10 to 18! That's 56% of a student's total class time. How does that mix of required and free elective courses compare with program requirements at community colleges and universities? How should it compare? Does it provide sufficient structure for the total educational program for either the college bound or the tech-prep student?

In order to utilize their existing teaching faculties best, many schools on the four-period day have encouraged students to take elective courses outside the core disciplines, while discouraging or even denying some students access to two courses per year in the same academic discipline. Courses in physical education, the fine arts, and vocational courses that prepare students for tomorrow's world of work are appropriate and desireable alternatives for students that should continue to be encouraged. However, something is seriously out of balance when staffing constraints cause us to encourage students to take two courses per year in band, choir, art, weight training, or vocational courses, while we're unable to even accomodate let alone encourage students to take two courses per year (one each term) in mathematics, science, foreign language, social studies, or language arts!

The four-period day has great potential. The availablity of 32 courses over four years can diversify and improve the education of our graduates. However, graduation requirements must be re-examined to provide all

students with a substantial core curriculum. Adding one additional required course in each of the core disciplines would still allow students a 40% increase in elective courses (from 10 to 14). I would personally favor a bit more structure by requiring a course in the fine arts and in computer applications (word processing, spreadsheets, data bases, and telecommunications). That still leaves 12 of 32 courses as free electives.

In our mathematics programs, perhaps the best measure of success is the percentage of all students who successfully complete higher level courses in mathematics. This schedule allows us to offer students more time to learn mathematics, not less. We need more emphasis for all students in statistics and data analysis. Some of our students who are unlikely to succeed within existing time contraints could benefit from a two-term sequence in Geometry A/B, and Algebra II A/B. This would allow time for students to utilize powerful new visual tools like the Geometer's Sketchpad and computer algebra systems to make the concepts of these courses meaningful to a much broader audience. A two-term sequence in Technical Mathematics may be beneficial for some. An honors program could consist of Geometry/Algebra II at grade 9, Precalculus/Discrete Mathematics at grade 10, and AP level work in statistics and calculus during the 11th and 12th grades.

To make such programs more feasible, however, high school principals need more flexibility in assigning teaching positions to meet course demands without the current constraints of separate allotments for distinct classes of teaching positions. Only then can the full potential advantages of these innovative alternative schedules be realized. We need to break the chains that bind us to old paradigms so the goals of the Coalition's Shared Vision can become a reality.

*Randy Harter, Mathematics Specialist*
*Buncombe County Public Schools*

1. The North Carolina Mathematics and Science Coalition is one of fifty state coalitions originally funded with planning grants from the Mathematical Sciences Education Board of the National Academy of Sciences. The North Carolina Council of Teachers of Mathematics (NCCTM) is one of many organizations represented on the Coalition's board.

# Appendix E: Bibliography

## BIBLIOGRAPHY

The following are materials that focus on the use of time in our public schools. They are excellent resources for further study on this issue.


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